

**CALIFORNIA DEPARTMENT OF  
TRANSPORTATION**

**TELECOMMUNICATIONS (Wireless)  
LICENSING PROGRAM**

**LICENSING PROCESS and  
SITING GUIDELINES**

Instructional information to be used by District staff and shared with Telecommunications Carriers on the licensing procedures to install and operate a wireless facility on Caltrans owned property for private or joint use.



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Right of Way Program, Airspace Development Unit

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*Note:* If, after reviewing these procedures, the Telecommunications Carrier has questions or comments, please call the Telecommunications Licensing Program Manager listed above. All requests to license a specific site must be submitted to the District Airspace Manager (See Appendix B & C).

These procedures to license property to Telecommunications Wireless Carriers are a supplement to the Caltrans Right of Way Manual, Airspace Chapter, and are designed to assist District staff in licensing sites for Telecommunications Wireless Facilities and do not supplant the requirements identified in the Department's Airspace Development policies and procedures.

**PLEASE BE ADVISED** the information in this manual is updated on a regular basis; for the most current information, contact the appropriate department.

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District_____	
District Airspace Manager_____	Phone_____
Telecommunications Engineer_____	Phone_____
District Permits Office Phone_____	

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# **GENERAL INFORMATION**

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## **INTRODUCTION**

The California Department of Transportation (Caltrans), in an effort to improve communications for the traveling public and to generate revenue for the transportation system, is licensing Telecommunications Wireless Carriers (Carrier) to install and operate telecommunications facilities (Facility) on the properties owned by Caltrans for the operation of the State Highway System (SHS) and other transportation facilities.

## **CALTRANS' MISSION**

The mission of Caltrans is to:

*Provide the people of California with a safe, efficient and effective intermodal transportation system;*  
*Plan, develop, maintain, and manage interregional transportation systems;*  
*Assist and guide delivery of local and regional transportation services;*  
*Provide leadership for California's transportation future by conducting research and development, and by formulating plans, programs, guidelines and standards; and*  
*Be a good steward of its resources.*

To perform its mission, Caltrans has under its control and management property located throughout the State of California that is used for the safe and effective operation of its transportation systems.

Caltrans shall maximize public and private multiple use of property held for transportation purposes, including rights of way, in concert with community needs and good land use planning, when it is deemed safe to do so. Many of the properties are capable of accommodating a secondary use without interfering with the operation and future expansion of the transportation corridor.

This includes making property available for an unmanned telecommunications (wireless) facility under the terms of a non-exclusive license agreement when the licensing of a site benefits the public and is consistent with the State's transportation programs and needs.

## **MISSION of TELECOMMUNICATIONS WIRELESS LICENSING PROGRAM**

The purpose of the licensing program is to increase the mobility of voice and data information through an improved telecommunications infrastructure and to provide Caltrans with more efficient communications systems. The mission of the Telecommunications Wireless Licensing Program is to:

*Provide an efficient method to transport data that will improve the public's ability to communicate.*  
*Utilize Caltrans' owned assets to satisfy internal needs to establish a high tech network for communications.*  
*Generate revenue by licensing the site for a wireless facility when there are no negative impacts to operations.*

This mission statement is in concert with Executive Order W-18-91 issued by the Governor in October 1991, mandating that state agencies seek new opportunities to involve the private sector in maximizing the value of its real estate, and is supported by the Federal Highway Administration (FHWA), which finds this program to be consistent with the Federal Telecommunications Act of 1996 and the need to develop the future Intelligent Transportation System (ITS).

## **IMPLEMENTATION of the LICENSING PROGRAM**

In September 1996, Caltrans determined it was in the best interest of the Department and the Telecommunications industry to open its properties held for transportation purposes for joint use of wireless services. (See Appendix A.)

Properties identified as potentially compatible for a secondary use are:

- Facilities outside the right of way area, such as office buildings and storage areas.
- Sites available for lease in the airspace inventory (parcels identified as having no impact on the operations or safety).
- Maintenance stations, equipment yards and storage lots.
- Park and Ride (P&R) lots, without reducing the number of spaces available for parking.
- State Roadside Rest Areas (SRRA), without impacting the ingress and egress of the traveling public.
- Structures and real property within access control if independent access is available and the facility can be installed, maintained and operated with minimal impact to internal operations and no impact on the safety of the traveling public.

A license may be granted for sites identified in the above listed properties when it is found safe, does not interfere with traffic or other transportation uses, and is visually unobtrusive.

The Master License Agreement (MLA) approved by the California Transportation Commission (CTC) on May 1, 1997 must be executed by any cellular or Personal Communications Services (PCS) carrier interested in licensing a site. The agreement standardizes the terms and conditions that will apply to all specific sites licensed to a carrier, with a Site License Agreement (SLA) describing the specific use and restrictions for each site. (See Appendix D.)

The full implementation of the licensing program includes a continuous review and evaluation of the policy, process, and agreements used to license a site, and of the market rates received as a result of the installation and operation of the Facility. All Caltrans programs in the districts and in Headquarters, and Carrier staff, including brokers and consultants, are encouraged to provide input as to the effectiveness of the licensing program.

## **AIRSPACE AUTHORITY**

Caltrans has the legal authority to lease its property held for transportation purposes for a secondary use if such use does not interfere with the operation of the highway. S&H Code 104.12 states:

*“The State Highway Department (Caltrans) may lease to public agencies or private entities for any term not to exceed 99 years the use of areas above or below state highways, subject to any reservations, restrictions, and conditions that it deems necessary to ensure adequate protection to the safety and the adequacy of highway facilities and to abutting or adjacent land uses. Prior to entering into any lease, Caltrans shall determine that the proposed use is not in conflict with the zoning regulation of the local government concerned. The leases shall be made in accordance with procedures to be prescribed by the commission except that in the case of leases with private entities, the leases shall only be made after competitive bidding unless the commission finds, by unanimous vote, that in certain cases competitive bidding would not be in the best interests of the State.”*

The CTC Resolution G-97-06 authorizes Caltrans to license property to Carriers without competitive bidding when it is found that:

- the use of the property can accommodate this secondary use without interfering with the operation of the system or negatively impacting the safety of the traveling public.
- there is only one interested Carrier, or multiple Carriers proposing colocation, as evidenced by the submittal of one preliminary proposal.
- the Carrier has executed the standard MLA.
- the site license fee, cash only, is based on the Annual Base License Fee as set forth in the MLA, adjusted in accordance with the provisions therein.
- the use is non-exclusive in that colocation is required when feasible, without interfering with the existing Facility.

The process outlined below ensures that the licensing of sites for a Facility is consistent, fair, and equitable for all parties involved, and establishes a streamlined program that reduces costs and expedites the process of reviews and approvals.

### **PROPERTIES AVAILABLE for LICENSING to TELECOMMUNICATIONS WIRELESS CARRIERS**

As previously identified in “Implementation of the Licensing Program,” properties available for licensing include: offices, maintenance yards, storage/equipment lots, park and ride facilities, roadside rests, land held for future and completed facilities, and properties used for roadways (i.e. expressways and freeways), including light poles, sound walls, directional signs, and structures to support elevated crossings. This program cannot license sites on conventional highways, which are under the jurisdiction of the District Permits Office.

The licensing of the properties requires independent access for the installation, maintenance, and operation of such facility. Exceptions may be granted if they do not interfere with Caltrans’ internal operations or impact the safety of the traveling public. The process to get an exception is established by the Design and Local Programs Program (DLPP), and is initiated at the District’s Permits Office.

### **INVENTORIES and MAPS**

Listings of the various properties held for transportation purposes are available from the District Airspace Manager and/or the Telecommunications Licensing Program Manager. Inventories and/or listings available are:

- Asset Management (A/M) - inventory of all properties with “a facility” within or outside the access control line. Generally includes maintenance stations, park and ride facilities, roadside rest areas, office buildings, a limited number of airspace leases and most of the existing Caltrans operated telecommunications facilities.
- Airspace (A/S) - inventory of all properties within access control lines that are leased or are available for lease as identified by District Airspace.
- Excess Lands (EL) - lists all properties available for sale (or lease) that are no longer needed for a transportation facility.
- Maintenance Stations - lists all maintenance stations within or outside the access control line. Can also include equipment yards, maintenance shops, and storage lots.
- Park and Ride (P&R) lots - lists all park and ride lots within or outside the access control line.



- State Roadside Rest Areas (SRRA) - lists all roadside rest areas within the access control line.

It is important to note that there is no listing of all real property owned within access control (e.g. interchanges, light poles, directional signs, overcrossings). Also, as carriers obtain site specific longitude and latitudes when conducting radio frequency tests, future Caltrans listings will include these references under "Remarks."

Maps of the various properties held for transportation purposes are available to the Carrier as follows:

- Record maps of property within access control, available from District Right of Way Engineering, at a cost established by each district office for all public and private customers.
- Safety Roadside Rest Area Map entitled "Rest Area Ahead" available through the District Public Affairs office.

California State Highway Map identifies all the state highways that are under Caltrans' control, and is available through the District Public Affairs office or attached to the Master License Agreement (May 1997) as Exhibit B (but not included as an exhibit in this guidebook). Maps are available from each District Public Affairs office.

Other sources available include Caltrans' web site on the Internet. The address to view location maps is:

<http://www.dot.ca.gov/hq/row/tccw/tccw.html>

Specific parcel or site maps should be available on the Internet in mid-1998.

## **SHARED RESOURCES PROGRAM**

There are seven situations for a Carrier to share property with Caltrans:

1. Sharing vault, antenna or tower space on a Caltrans-owned telecommunications facility on Caltrans property.

*(Responsible Program: Maintenance's Telecommunications Unit)*

2. Sharing vault, antenna or tower space on a Caltrans-owned telecommunications facility on property leased to Caltrans from another governmental entity, specifically for telecommunications facilities.

*(Responsible Program: Maintenance's Telecommunications Unit)*

3. Installing and managing a Facility on property leased to another private entity through Caltrans Office of Airspace Development, and sharing some of the vault, antenna, or tower space with Caltrans and/or other telecommunications providers.

*(Responsible Program: Right of Way's Airspace Office)*

4. Installing and managing a Facility on property (real and/or personal) owned by Caltrans, which includes:

- Sharing the tower with another carrier (sub-use).
- Sharing the tower and vault with another carrier (direct-use).
- Sharing the tower and vault with Caltrans (colocation with Licensor).
- Sharing the tower and vault with Caltrans in excess of the space reserved in the Master License Agreement (MLA).

*(Responsible Program: Right of Way's Airspace Office)*

5. Licensing the property (real and/or personal) owned by Caltrans and developing a multiple use type facility, when the Carrier acts as a Master Licensee and sublicenses the vault, antenna and tower space to other licensed telecommunications carriers (wireless). This includes network developers who wish to install a multiple use type facility.

*(Responsible Program: Right of Way's Airspace Office)*

6. Installing and managing a telecommunications facility on property (real and/or personal) leased by Caltrans, or when Caltrans' real property rights are through an easement.

*(Responsible Program: Right of Way's Airspace Office)*

7. Designing, constructing, installing, operating and maintaining a telecommunications network for Caltrans in return for using multiple sites within a corridor in lieu of a license fee. Caltrans will advertise the need for a system by way of a Request for Proposals.

*(Responsible Program: Traffic Operations)*

*Note:* Refer to "Implementation of the Licensing Program" for a description of the types of property held for transportation purposes that may be available for license.

This "Licensing Process and Siting Guidelines" for a Carrier applies only to situations #3, #4, #5, and #6 above. Sites will be made available for licensing (situations #3, #4, #5, and #6) in one of two ways:

1. Sites potentially suitable for a Facility will be marketed and advertised by the District Airspace Manager (Airspace) after the site is reviewed by the District Airspace Review Committee (DARC) to ensure there is no negative interference with Caltrans' operations and communications, and if there are communication needs that can be satisfied by sharing the facility, subject to the provisions of the MLA. Carriers respond directly to Airspace with their interest in licensing the site for a telecommunications use. If it is determined that the site can accommodate a secondary use, the site will be made available for licensing.
2. Carriers locate a site suitable for their needs that is either identified as property compatible for a secondary use per the inventory of Caltrans-owned properties, or not yet identified as a property compatible for a secondary use but which the Carrier believes could be compatible. The interested Carrier submits a letter to Airspace identifying the site and expressing an interest in installing a Facility, briefly describing the purpose and type of Facility. The DARC is convened to determine any potential interference with Caltrans operations and communications, and, if none, determines if Caltrans wants to exercise its right to share space on the tower subject to the provisions in the MLA. If it is determined that the site can accommodate a secondary use, the site will be made available for licensing.

## **TELECOMMUNICATIONS (WIRELESS) FACILITIES**

For purposes of this licensing program, telecommunications (wireless) facilities (Facility) are specifically for cellular transmission and Personal Communications Services (PCS). It is anticipated that agreements with cell site developers will be available in the near future. Proposals for Enhanced Specialized Mobile Radio (ESMR) and paging facilities are currently handled by the Traffic Operations Program since these facilities will be allowed through a separate process.

Generally, the types of facilities that will be considered as an acceptable secondary use are:

- structures necessary to mount an antenna to a reasonable and approved height for transmission.
- structures necessary to house radio equipment.
- supporting equipment (i.e. air conditioning, generators).
- interconnecting cables for power and transmission.
- telephone cables and/or microwave dishes.
- ancillary improvements (i.e. fencing, foundations, security and warning devices, required markings).

There are restrictions on the use of batteries and generators that could create a hazardous condition for the traveling public and to the real property. Additionally, all proposals to use property underneath an elevated highway must include a Project Study Report (PSR) that evaluates the impact of the improvements on operations and safety.

## **ROLES AND RESPONSIBILITIES OF CALTRANS PROGRAMS**

Since the approval of a Facility requires input from all impacted Caltrans programs, district and headquarters staff have a critical role in the review of all proposals submitted by Carriers. Whether staff are participating in the DARC or developing siting guidelines, their responsibility is to ensure that all program concerns and needs are addressed when approval for the installation and operation of a Facility is granted.

Traffic Operations Program (Traffic Ops): In addition to being the Project Manager for all shared resources in connection with multiple sites for a Caltrans network, Traffic Ops is a core member of the DARC, with responsibility to ensure the proposed Facility will not interfere with traffic flow nor adversely impact the safety of the traveling public. All requests to use the controlled access way for ingress and egress to the site for testing, installation, or maintenance must include Traffic Ops review and approval. Traffic Ops is also responsible for coordinating and developing the regional and statewide list of communication needs in relation to maintenance operations, traffic operations, and the Intelligent Transportation System (ITS).

Right of Way Program (HQ R/W): Responsible for the acquisition of all right of way for a proposed transportation project and the Program Manager for all real property functions within Caltrans.

Real Property Services (HK4): Responsible for all non-project delivery functions within Right of Way, i.e. Property Management, Excess Lands, and Airspace Development.

Office of Airspace Development (HQ A/S): Responsible for development and implementation of leasing all properties within access control that can accommodate a secondary use. In some cases, District Airspace will take the lead in leasing property outside of access control. The Caltrans Right of Way Manual's Airspace Chapter provides the basis for the policies and processes incorporated herein.

Right of Way's Telecommunications Licensing Project Manager (R/W Telecom): Responsible for administering and managing the site licensing aspect of this program, which includes establishing policies and procedures to review and approve proposals to install and operate wireless facilities, as well as the internal process to receive, track, and report on the revenues generated.

District Airspace Managers (Airspace): Responsible for reviewing and coordinating approval of the proposals submitted by Carrier, ensuring that the siting guidelines established by all impacted Programs within Caltrans are considered before a site is approved. In addition, Airspace will assist all Carriers in arranging for radio frequency and soil tests through the District Permits Office or other district programs. All reviews will ensure the proposal does not have a negative impact on the operation of the transportation system or affect the safety of the traveling public.

District Airspace Review Committee (DARC): Review and approval of all proposals to use Caltrans-owned property for a secondary use via a license agreement. Consists of all district representatives whose program is impacted by the proposed use, i.e. Traffic Operations, Project Development, Environmental, and Maintenance. The Maintenance Telecommunications Engineer is also a part of the team.

Office of Radio Communications Engineers (Telecom Engr): Headquarters based unit comprised of engineers that work in the districts with the responsibility to develop and manage all radio systems for Caltrans' internal communication needs. As a core member of the DARC, the Telecom Engr will review the potential impact on Caltrans' existing and planned telecommunications systems and other users in the area. There may be times when other concerns arise (e.g. FCC rules compliance) but for the most part the review will focus on these three areas:

1. Does the proposal pose an interference concern to any of Caltrans' present or future planned communications systems?
2. Does Caltrans have any present or future communications needs at the proposed site?
3. Does the proposal pose an interference concern to other users in the area (state agencies in particular)? If so, the Department of General Services Telecommunications Division will also need to review the proposal.

The Telecom Engr works directly with Traffic Operations in reviewing and updating Caltrans' needs on a district, regional, or statewide basis. The Telecom Engr will conduct any necessary intermodulation studies, which may include the need to involve Department of General Services Telecommunications Division (DGS), if the site is within interference range of a multi-use state system. Additional charges for DGS review will be billed directly to the Carrier and are not part of the administration fee.

Office of Landscape Architect (OLA): Landscape Architects are licensed professionals and are responsible for the review of all proposals to determine the impact on existing or planned landscaping, to provide input on aesthetics and visual impacts of the proposed facility, and determine if upgrades or replacement of plantings will be required as part of the review/approval of the Facility. Landscape Architects also review and approve Facilities on State Roadside Rest Areas (SRRA).

Environmental Program: The District Environmental Planners review the proposed Facility to determine whether the project could cause significant impacts to the environment (species habitat, cultural resources, water quality, historical landmarks, etc.). In making their independent assessment of project impacts, they ensure the information submitted addresses all California Environmental Quality Act (CEQA) and National Environmental Protection Act (NEPA) requirements.

Permits Office (Permits): District Permit Engineers are responsible for issuing all permits to use properties within access control and other properties as their policy dictates. They are the lead on all proposals to use conventional highways for a Facility. Permits maintains a file on all Facilities within access control for future maintenance and project development reference. Permits in Headquarters sets the policies and procedures for the issuance of encroachment permits to test, install and maintain Facilities.

Design and Local Programs Program (DLPP): Responsible for the development of siting guidelines and future use of properties held for transportation purposes. Requests to obtain an Encroachment Permit by Exception are processed through Permits in accordance with policies and procedures established by the DLPP.

Federal Highway Administration (FHWA): Since most properties and facilities used by Caltrans were acquired with federal funds, FHWA has final review/approval authority over all proposals for a secondary use, including: construction plans, environmental documents, colocation and assignments.

Special review by the FHWA will be required for all proposals within P&R lots to ensure the proposal will not impact the number of parking spaces available for commuters since special funding was obtained for these facilities. Documentation stating the P&R is not being used to full capacity could require the District to develop a plan to bring it to full capacity, or a request by FHWA to sell all or a portion of the facility with all proceeds to be returned to the federal account.

*Note*: See Appendix C for Caltrans representatives and phone numbers.

# LICENSING PROCESS

# **LICENSING PROCESS**

## **BASIC LICENSING REQUIREMENTS**

It is the Carrier's responsibility to certify that all installations or construction meets or exceeds any applicable design criteria.

All improvements constructed on Caltrans property are considered to be the property of the State after the term of the license has expired, or upon abandonment, unless specifically stated in documentation as being otherwise. Caltrans reserves the right to require the primary Carrier to remove all improvements at the expiration of the lease.

Independent access from the highway is required for all licenses.

Carrier is responsible for the clean up of hazardous materials introduced to the site during the term of the Site License Agreement (SLA). Caltrans is responsible for the clean up of pre-existing conditions, but may elect not to do so because of funding constraints, and as such the site will not be licensed.

Road rights on property other than State owned lands are not guaranteed. The Carrier must acquire their own easement rights where needed.

The Master License Agreement (MLA) and/or SLA is executed by the Program Manager of the Right of Way Program (or designated representative) and requires the pre-approval of the Federal Highway Administration (FHWA). District Airspace Managers (Airspace) are delegated the responsibility to execute SLAs; however, all "special clauses" must be pre-approved by the Office of Airspace Development (HQ A/S).

No project shall proceed to construction without the written approval of the FHWA, Office of Radio Communications Engineers (TelecomEngr) and the District Airspace Review Committee (DARC). Airspace will transmit such approval to the Carrier.

For all properties within access control, an Encroachment Permit will be required prior to construction and an annual maintenance permit will be maintained in order to conduct any repairs or make modifications to any equipment within the access control.

Telecom Engr and the Department of General Services (DGS) Telecommunications Division establish standards to ensure the integrity of all communications facilities and minimize interference with State agency communications. In addition to technical specifications, these standards may restrict the number of facilities allowed within range of state systems or other licensed facilities. A proposal can be refused based on the number of telecommunications facilities existing at the location.

On an annual basis, every carrier who has executed the MLA will provide proof of liability insurance coverage and submit for review a financial statement in accordance with the provisions of the MLA

## **PROPOSAL REVIEW**

All requests to license property held by Caltrans, whether in response to the District's marketing of a site or the Carrier's transmission study, must be submitted in writing to the District Airspace Manager (Airspace).

The review and approval of all requests is conducted in three stages conceptual, preliminary and final.

Conceptual: Determination of the proposal's compatibility with existing uses, and a review of the proposed installation, operation and maintenance's impact on safety and internal issues. Requires a simple narrative by the Carrier describing the proposed use and location, depicted on a simple diagram and map.

Preliminary In-depth review of the proposal considering access, security, construction, maintenance, installation, interference, safety and other issues raised during the conceptual review. Requires preliminary blue prints depicting size and height of the facility, square footage of the area to be "licensed", square footage of the area to be used during construction, and specifics on access, fencing, and utility hookups.

Final In-depth review and approval of the proposed construction, along with verification of all reviews and required approvals of governing entities. Requires final construction plants (depicting all excavations and trenching), approved use and building permit by the local entity, approved environmental document, and resolution of all issues raised during preliminary review.

See Exhibits 1 - 4 for flowcharts depicting the above process.

### **DISTRICT AIRSPACE REVIEW COMMITTEE (DARC)**

The DARC reviews all proposals and shall:

1. Properly evaluate the proposal.
2. Determine if the granting of rights will impact:
  - Caltrans' ability to fulfill its mission responsibilities.
  - The integrity of the communications facility.
3. Determine Caltrans' future needs for the property (e.g. future road project, consolidation of maintenance facilities, telecommunications systems that might interfere).
4. Determine if there are internal needs that can be satisfied by the approval of the proposal, i.e. sharing of telecommunications facilities.

Any modifications to existing systems or property that exceed required upgrades or additional services and improvements to the transportation system must be pre-approved by the Airspace Advisory Committee (AAC).

The DARC is comprised of District representatives from programs impacted by the proposed facility. The "Core" team will always consist of program representatives from Traffic Operations, Maintenance Operations, Environmental, and the TelecomEngr. The lead for the DARC is the District Right of Way Airspace Manager who is responsible for ensuring all proposals receive the appropriate level of review prior to entering into a SLA. If the proposed facility is within access control, in addition to the Core Team, the DARC will include a representative from Facilities (Administration). If the proposed facility is within access control, in addition to the Core Team, the DARC will include Landscape Architect, Project Development, and Hydraulics, as well as the "operator" of the property/facility e.g., Park and Ride, Roadside Rests, Structures, Maintenance Station Superintendent, or Bridge Engineers.

Airspace may request representatives from any other program impacted by the proposal. Additionally, District Asset Management will be advised of all conceptual and preliminary reviews.

It is strongly recommended that each program select one permanent representative to serve on the DARC meetings to ensure consistency in application of the siting guidelines and review process.



The DARC will review all requests for additional equipment, any colocation and all extensions to the ten-year SLA term. The review will ensure the requests or extensions are compatible with Caltrans intended use at the site and do not interfere with the safety or operations of the public and of Caltrans.

The DARC representatives should be at the highest level in order to make a final decision. It is recommended that each member has the full support from upper management to determine the feasibility of the proposal. The DARC can and should restrict the height, exact location, access, and security to protect Caltrans interest and assets. In the formal response to the Carrier, the DARC's determination should clearly identify the issues and the reasons, and allow the Carrier to mitigate.

## **LICENSING AGREEMENTS**

Documents are used to grant the Carrier the right to construct, install, operate and maintain their personal property on Caltrans-owned real estate. As such, the Carrier has no real property rights and cannot encumber the property in order to obtain a loan to construct.

Master License Agreement (MLA): The primary licensing document, with standard terms and conditions that are not site specific (i.e. insurance, liability, hazardous materials), that apply to all Carriers prior to entering into a Site License Agreement (SLA). (See Exhibit 9 for a summary of the major terms and conditions.)

Site License Agreement (SLA): A secondary document for a site approved by the DARC at the agreement phase. It identifies the specific terms and conditions for the proposed Facility; i.e., base license fee, specific type of facility, terms and options, access, contact information, hazardous materials, description of the facility, square footage of the site, maintenance, and includes restrictions regarding the use of sites on or near Caltrans structures (e.g. columns, signs, buildings). Attachments include the final plans, legal description and plot plan/map showing where the facility is located on the premises. If Caltrans will jointly use the facility, the identification of Caltrans equipment must be shown on the final plans, along with an agreement on its installation. The SLA will clearly identify any controls and permits required by Traffic Operations for construction or maintenance of the Facility within access control. (See Exhibit 5.)

Additional clauses are required for sites under or near Caltrans structures; e.g., for column protection, use of soundwalls, restrictions on P&R or SRRAs, entry control in or on office buildings. (See Exhibit 10.)

Option Agreement: There is no Option Agreement associated with the license of a site. Instead, each Carrier is entitled to a six-month "local permitting period" that grants time to obtain all necessary reviews, approvals and all permits. A total of four three-month extensions (12 months) can be granted under extenuating circumstances if the Carrier has diligently pursued approval but the delay is beyond their control. Full payment is required for all extensions, unless Caltrans did not respond to a preliminary or final proposal within the 45-day review period.

Though the Carrier is required to pay full rent beyond the six month local permitting period, extensions allow them to cancel the SLA at any time prior to the issuance of an encroachment permit without being subject to all the termination and cancellation penalties in the MLA.

## **RATES and FEES**

Annual Base License Fee: Annual payment for the site using the pricing matrix in the MLA, to establish a rate based on geographical location and type of equipment (number of antennas and square footage of enclosed area). Annual payment is paid in advance at the time the Encroachment Permit to construct is issued; and thereafter every July 1st. The License Fee is adjusted 3.5%+, every July 1st. (See Exhibit 6.)

If competitive bidding is required to select one of the many interested Carriers, the license fee will be the highest bid, using the pricing matrix as the minimum bid.

Administration Fee A processing fee, currently \$1,000.00, is paid when the proposal has been conceptually approved and the Carrier submits a preliminary proposal to the District for review and approval. The fee covers staff costs associated with the review and approval of the preliminary and final documents, and includes a six-month permitting period.

Payment: All fees (permit, administration, license, collocation) must be paid in advance to the Caltrans accounting office identified in the SLA, the billing statement or other appropriate notification. Non-payment of the license fee requires a penalty of 1% for each month (12% per annum) the account is delinquent. The extension of the SLA can be held up if the Carrier is in arrears.

Security Deposit: There is no security deposit as the MLA requires advance annual payments.

Permit Fees: See "Permit" Section.

## **LENGTH OF LICENSE**

Terms/Length of agreement The term of the MLA is five years and will be reviewed, and revised accordingly, before July 2002. Recommendations to continue with the MLA will require Airspace Advisory Committee (AAC) and California Transportation Commission (CTC) approval. The terms and conditions of the SLAs executed during the first five years will remain unchanged during the life of the SLA.

The SLAs are for ten years with three additional periods (options) of five years each. The SLA term can be modified to match specific Carrier or Caltrans needs since a future project may require Caltrans to license the site for only three years. At the end of each term, the SLA can be extended for an additional term; however, the Carrier must provide advance notice if it intends to extend. Airspace must coordinate a review by the DARC to ensure there are no immediate needs or potential interference by continuing to license the site.

Cancellation Either the Carrier or Caltrans can cancel the MLA and/or SLA at any time subject to the terms of the MLA. Caltrans can require the Carrier to remove or relocate the Carrier's equipment at the termination or cancellation of the SLA. The Carrier may be compensated for early termination of the SLA during the first ten-year period based on the amount of unamortized improvements.

## **PRICING MATRIX**

The base license fee is determined by the greater of the number of antennas; or the square footage of the enclosed area. The pricing matrix established in the MLA will be used for all carriers proposing a site on Caltrans' property and is summarized below:

### ***TYPE OF EQUIPMENT:***

*Macrocell*: Facility with 9 or more antennas and/or fenced area containing equipment building or cabinet, foundation, and monopole/tower is 500 square feet (not to exceed 16 antennas and 2,000 square feet)

*Minicell*: Facility with 5 to 8 antennas and/or fenced area containing equipment building or cabinet, foundation, and monopole/tower is 150 to 499 square feet

*Microcell*: Facility with 1 to 4 antennas and/or fenced area containing equipment building or cabinet, foundation, and monopole/tower is less than 150 square feet

*GEOGRAPHICAL LOCATION – as established on the Caltrans “California State Highway Map”:*

*Category 1:* All urbanized areas on the “map” within the Northern California counties of Alameda, Contra Costa, Marin, San Francisco, San Mateo and Santa Clara, and within the Southern California counties of Los Angeles, Orange and San Diego.

*Category 2:* All other urbanized areas on the “map” (e.g. Sacramento and Fresno).

*Category 3:* Remaining areas on the “map” (shown in white).

The geographical area and the type of facility establishes the following Annual Base License Fee schedule:

	<u>Macrocell</u>	<u>Minicell</u>	<u>Microcell</u>
<u>Category 1</u>	\$21,000 (\$1750/m)	\$18,000 (\$1500/m)	\$15,000 (\$1250/m)
<u>Category 2</u>	\$16,200 (\$1350/m)	\$15,000 (\$1250/m)	\$12,000 (\$1000/m)
<u>Category 3</u>	\$12,000 (\$1000/m)	\$12,000 (\$1000/m)	\$ 9,900 (\$ 825/m)

Annual payments are due on July 1st of each year, with pro-rated payments for sites licensed in mid fiscal year (e.g. April 15th 1997 would pay 30% of the annual payment and then a full year’s rent on July 1st)

The annual Base License Fee will be adjusted annually by 3.5% each July 1st and in the following situations:

1. Adjustments in the rate, increase or decrease, whenever equipment area or the number of antennas changes (e.g. carrier removes one antenna from a total of five, changing the site from a minicell to a microcell).
2. Increases to the rate at the end of each term (10, 15, 20, 25 years) based on increases in population as depicted on the revised maps (e.g. rural areas re-categorized as urbanized areas).
3. Reevaluation or reappraisal of fair market rent based on market data at the 15th year term of each SLA.

Should the proposal require only part of the Facility be located on Caltrans property (e.g. the vault is located outside the right of way on private property), the license fee will be based on the number of antennas (whether mounted on the Carrier’s structure or Caltrans structure) on Caltrans property.

Collocatees will be charged a license fee based on the pricing matrix and/or a percentage as described under “Collocation” and as required in the MLA.

Any Carrier requesting a facility with more than 16 antennas or a fenced area exceeding 2,500 square feet must pay a higher rate than the pricing matrix dictates. For proposals located in the Rural or Urban area, the fee for a larger site will be the next category up, for example:

A 17 antenna and/or 2,600 square foot facility in a rural area would be treated as a Macrocell, Category 2 (not Category 1). If the same site were in an Urban area, it would be treated as a Macrocell, Category 3 (not Category 2). Headquarters will determine the rate for any proposals larger than a Macrocell in a Prime Urban area after receiving a district recommendation. The proposal will be reviewed to determine if the Carrier is in need of all the space and antennas for their facility or whether they are adding the extra space and antennas for a potential collocatee.

## COLOCATION

The MLA is non-exclusive and requires colocation with all other interested Carriers if it is physically possible, without interfering with the Carrier's current use. This includes requests by Caltrans to share facilities at a later date. All requests for colocation must follow the standard review/approval process.

Each collocatee will be required to have a separate SLA subject to the MLA, and the term must run coterminous (all expiring on the same date). There are two types of colocation per the MLA, Sub-User and Direct-User. A Sub-User collocatee is a carrier that uses the licensee's antenna mount and equipment area to mount their antennas and house their equipment. A Direct-User collocatee is a carrier that only uses the licensee's antenna mount and has their own equipment area. The base license fee for a Sub-User is 50% of the licensee's annual payment, or 50% of the payment the collocatee pays the Carrier, whichever is higher. The base license fee for a Direct-User is the full rent based on the number of antennas and/or square footage of the enclosed equipment area, whichever is higher.

The administration fee for colocations on an existing facility is currently \$1,000.00 and the review/approval can not be unreasonably withheld. However, if the colocation is submitted as one proposal with the primary facility, only one administration fee for the entire review will be required. See Exhibit 11 for a description of different colocation scenarios and license fees.

## CALTRANS RADIO NEEDS:

The MLA specifies what Caltrans can receive in the way of "space" on the facility, in addition to the full base license fee, as follows:

1. Space to mount one 800 MHz omni-antenna approximately 44" long, 1.5" in diameter, with a weight not to exceed twenty pounds, to be mounted not less than 20' high, as designated by the Carrier.
2. Space for radio equipment in a 2' x 2' x 7' area within the shelter or on a concrete pad.
3. Conduit or cable tray for transmission from equipment area to antenna.
4. Cable access to phone and power lines.

Requests for additional trades or in-kind services are not allowed. Any additional space or construction required must be funded by the program and paid directly to the Carrier. As such, any work done by the Carrier for Caltrans in connection with the installation or repair of Caltrans' communications equipment must be paid directly by Traffic Operations or the appropriate program. The SLA must identify who will install Caltrans' equipment, and if the carrier installs it, the SLA must establish the cost, payment method, time schedule and installation standard. No rental offsets or credits are allowed.

In-kind services should not be confused with necessary upgrades or modifications required for the Facility such as fencing, replacement of plants, separate access approach, gate in access controlled fence, or grading of slopes. After the preliminary review, the DARC should identify and inform the Carrier of specific construction requirements (e.g. trenching depth and location, encapsulation of contaminants).

If the Telecom Engr determines Caltrans has no immediate or future needs at the site, the space reserved on the monopole or tower can be used for a different type of antenna, if the carrier is agreeable to a substitution. An example is an 880 MHz system for Traffic Operations that is similar in size and weighting and doesn't create an interference problem with the Carrier's frequencies. In addition to the space reserved in the MLA, the DARC can request space on the lower end of the monopole to place surveillance cameras. The Carrier will determine if the cameras would impact the loading capacity of the monopole. The District must have or will have the equipment at the site to transmit the data back to a receiving station.

## **PERMITS**

Annual Survey Permit It is the Carrier's responsibility to ensure the proposed facility is suitable for their needs, and as such, it may need to test the site for clear transmission prior to submitting a conceptual or preliminary proposal. The Carrier will be directed to the Permits to obtain an annual survey permit for \$700.00 to be held on deposit, and charged against, for each site requiring an inspection. The permit inspector will verify that the testing in an access controlled area is being done in accordance with all safety and traffic guidelines. At the end of each year, the Permits will determine the number of sites it has inspected and charge a fee of \$70.00 per hour for the inspection and refund or bill the Carrier for the difference.

For properties outside of access control, Airspace will coordinate all testing on sites by the Carrier. The maintenance superintendent will be responsible for ensuring the testing on a maintenance station does not interfere with internal operations. There is no charge for the inspection of testing outside of access control.

Encroachment Permit for Construction After the Carrier obtains all approvals to construct the facility, the Encroachment Permit to construct can be issued by Permits. There is no charge for this permit as the cost is charged to the Airspace account. The permits inspector will ensure construction activities do not violate the provisions of the permit, and will inspect the facility after construction, issuing a Notice of Completion which cancels the Encroachment Permit. This inspection does not absolve the Carrier from conducting a building inspection in accordance with the provisions of the MLA.

In addition to standard restrictions for the construction permit, any permit issued for a maintenance station will require:

1. The Carrier provides the Maintenance Station Superintendent with the construction schedule at least three weeks prior to construction. This will be posted on the maintenance station crew room bulletin boards
2. All mobile equipment used to install the facility will be equipped with Cal-OSHA approved back-up warning alarms and flashers.
3. Orange colored traffic cones will be used to surround parked mobile vehicles and equipment during installation.
4. Hard hats and vests will be worn by all communications personnel during installation.
5. For the safety of Caltrans' maintenance personnel and the public, Caltrans' maintenance personnel shall have immediate emergency access to wireless facilities

Annual Maintenance Permit If the facility is within access control, the Carrier will be required to obtain an annual permit to maintain and service their equipment that is accessed from the travel way. Authorized work includes replacing damaged equipment, upgrading or modifying existing equipment and maintaining access to the sites. The Carrier must obtain prior approval from the DARC and Permits before adding or modifying equipment to the site, or changing access locations.

See Appendix F and G for further information.

Soil Testing Permit This permit is issued by the District Right of Way Office through a Right of Entry and is coordinated by Airspace. There is no fee for this permit.

## **PROCESS to LICENSE a SITE**

Airspace is the lead on all activities related to the selection and approval of a site for a wireless telecommunications facility. The initial contact is usually from the Carrier or their representative who has

found a site that will be suitable for their network. The following information describes the steps in the licensing process for Airspace to get the site approved for construction.

When the Carrier contacts the district for information about licensing a site for a Facility, the district should provide the Carrier with a copy of this “Process and Guidelines”, copies of all district inventories and maps, and the phone numbers of appropriate contacts (e.g. Permits Office – for permits to test, R/W Engineering – for copies of record maps, and Airspace Coordinators – for process to license).

If the Carrier is inquiring about general information, the “Process and Guidelines” should provide the background and steps necessary to get started in identifying a suitable site. District staff may need to provide additional clarification or discuss modifications to the process that apply to their district only (e.g. particular forms).

However, if the Carrier has selected one or more possible sites, the district should be prepared to initiate the conceptual review process by assisting the Carrier in obtaining the permit to test the site for radio frequency and/or meet the Carrier at the site(s) to discuss issues related to siting and restrictions.

Once the Carrier is ready to submit the Conceptual proposal, the district should review the information required to ensure the Carrier submits a complete package (See Exhibit 12). Minimum information required:

- Pole height, number of antennas, perimeter dimensions (fenced area).
- Type of facility (PCS, Cellular, other).
- Expected time schedule for building permits, construction, etc.
- Other collocatees (including existing facilities).
- Sketch or drawing of the area (site) needed on Caltrans facility (premise).
- Location map (general and specific area).
- Optional: Depiction of the equipment (photo rendition, sketch, etc.).

The DARC is responsible for understanding the siting guidelines and approving proposals based on the standards and policies established in each program. The DARC should meet on a regular basis to review and discuss proposals, siting issues and the review process itself.

The DARC has 15 working days to respond to a conceptual proposal. The proposal is reviewed to determine if it is compatible with existing use and if it is feasible considering all safety and interference issues. Airspace routes the proposal to the appropriate DARC members with a request to review and comment on compatibility and feasibility, listing all concerns that must be addressed by the Carrier. A formal meeting can be scheduled on complex or controversial projects, and to discuss issues that may be cross-functional.

Critical to the review is the TelecomEngr’s comments on interference, need for intermodulation studies, additional technical specifications needed for preliminary review and/or identification of internal communication needs that can be satisfied by the sharing of the proposal facility with the Carrier.

After the review is complete, Airspace sends the Carrier a letter detailing the issues raised by the DARC during the review and stating whether the proposal is conceptually approved or not. If the proposal is approved, the letter should be accompanied by the “Proposal Checklist” so the Carrier can proceed to the next phase. If the proposal cannot be approved, the letter should clearly state why (e.g. pending project, siting conflict, or an interference issue). This will give the Carrier a chance to redesign or attempt to mitigate the issues. Additionally, a copy of all “denial” letters must be sent to the R/W Telecom to review with the responsible program as to the validity of the issue causing the denial. The approving letter should

request the Carrier to submit a preliminary proposal within the next 30 days. After 30 days, other interested Carrier's proposals will be accepted.

Depending on the DARC's decision, the Carrier may prepare a response to the "denial" in an attempt to mitigate safety or interference issues, locate other "suitable" sites, or submit a Preliminary proposal.

Upon receipt of a Preliminary proposal, District Airspace should verify the representative submitting the proposal is authorized to do so by the Carrier, and confirm the Carrier has executed the MLA and is in good standing as to insurance, financial status and other existing SLAs. The next step is to ensure no other Carriers have indicated an interest in the proposed site.

If there are other interested Carriers, all parties must be advised that a competitive bids required to select the primary Carrier unless they locate other suitable sites or submit one proposal that provides for colocation with all interested parties. If the interested Carriers locate other suitable parties, they should submit separate preliminary proposals and processing fees. Airspace will conduct separate DARC reviews. If one proposal is submitted, identifying colocation with all interested Carriers, the primary Carrier should submit one preliminary proposal for the site, which requires only one DARC review and one proposal fee.

The Preliminary DARC should be a formal meeting to allow all affected programs to discuss the siting requirements, responsibilities, and use restrictions such as access, utilities, maintenance, permits, aesthetics, and Caltrans right to share space. The proposal must be reviewed in-depth to determine the full impact of the proposal and identify issues that need to be addressed by Carrier during construction, installation, operation and maintenance. The proposal must include all required upgrades/modifications to the site that are essential prior to the approval of the site (e.g. slope protection, paving the bare dirt). No rental offsets are allowed for required upgrades. The DARC or the Carrier may request a formal presentation by the Carrier.

Some suggestions for Airspace to conduct a preliminary DARC are:

- Ensure the appropriate programs are represented (not too many or too few).
- Set a time frame to review the proposal (i.e. keep blueprints in a common room for 1 week prior to the meeting).
- If programs do not comment within 20 working days, comments will not be accepted later.
- Any issues that must be resolved in Headquarters will require at least 15 working days to review and approve.
- Program representatives who have no objections or comments should indicate if they will need to review future plans (e.g. revisions, construction details).

Formal response is due to the Carrier within 45 days of receipt of the proposal, regardless of any presentations by the Carrier or oral responses made by Airspace. The response should approve the proposal as submitted or identifying other issues that need to be resolved. Failure to respond with status of review within 45 days penalizes the DARC and provides the Carrier with additional months to obtain all final approval without penalty or payment.

Response to the Carrier should indicate the proposal was reviewed and approved as submitted, or not approved and the reasons cited as to why.

Once the Preliminary proposal is approved, the SLA can be executed. The annual base license fee must be established per the MLA. Special clauses relating to access, maintenance, hazardous materials and Licensor's use must be pre-approved by HQ Telecom, prior to execution by the Carrier and District. Airspace should ensure through R/W Telecom that the Carrier has a current financial statement and insurance certificate on file prior to signing the SLA. Once the SLA is executed, the Carrier will have six months ("Local Permitting Period") to obtain all reviews/approvals required to begin construction.

Depositing the administration fee, and the base license fee, must be done in accordance with standard Accounting Procedures and the Right of Way Property Management System (RWPS) instructions.

During the Local Permitting Period, Carrier and Airspace are in constant communication while reviews and approvals are obtained to get final clearance for construction of the facility. Prior to the issuance of the encroachment permit to construct, the Carrier must obtain all final reviews and approvals that may include but are not limited to:

1. California Environmental Quality Act (CEQA) and National Environmental Protection Act (NEPA), reviewed and approved by the local agency, Caltrans Environmental Branch, and FHWA.
  - For approval, Airspace must submit to HQ A/S the Categorical Exemption/Exclusion Determination that has been signed by the District Environmental Branch. HQ A/S will obtain approval by FHWA.
2. Local agency approval of the proposed use and issuance of a building permit.
  - Submitted by the Carrier to HQ A/S prior to applying for an Encroachment Permit to construct. Airspace will advise Permits that all final approvals have been offered and provide a copy of DARC's final approval.
3. Design and specifications as determined by Uniform Building Code and California Code of Regulations, Title 24, FCC regulations, FAA Standards, PUC standards, and any other requirements established by the Telecom Engr.
  - Airspace should obtain a letter from the TelecomEngr stating all issues have been resolved as to interference and needs.
4. Preliminary and final approval of the plans by the DARC, TelecomEngr and the FHWA.
  - For approval, Airspace must submit preliminary and final DARC comments, three sets of plans (miniaturized to 8.5" x 11"), photo renditions/sketches, and the narrative proposal by carrier.
5. Legal description of the site.
  - Access to the site cannot be identified as an "easement".

In addition to reviews and approvals by FHWA and the TelecomEngr, the proposal may require an Encroachment Permit by Exception if the proposal is not consistent with current siting guidelines but the DARC supports a waiver. The typical example is when access to the facility on Caltrans property is only available from the traveled way.

Prior to construction or installation of the Facility, the Carrier must obtain final approval before requesting the Encroachment Permit to construct. There is no fee for this permit. However, the annual base license fee through June 30th of the next year is required when the permit is issued.

During construction or installation, the permit inspector will inspect the operations to ensure that all safety and traffic requirements are being followed, and any violations of same will require cessation of all activities until the matter is resolved. Failure to comply with the Permit inspector's requests will result in a citation by the California Highway Patrol and a possible revocation of the SLA, including all future rights to license any site for a facility. When construction is complete, the permit inspector will issue a Notice of Completion, with copies to the Carrier and Airspace. The original is kept with the approved blue prints in the Permit Office for future reference by Maintenance and Project Development staff.

If the proposed facility is not within access control, an Encroachment Permit is not required but a letter authorizing construction from Airspace is needed prior to any work beginning on the premises. Airspace must coordinate with the operator of the facility prior to construction and may request inspection by the permit inspector, Project Development and/or Telecom Engr, as appropriate to ensure the construction is completed per all requirements and standards.



The local agency's building inspector is responsible for ensuring all local requirements are followed, as are other governmental entities, who might issue a Notice of Completion when all work is completed. Airspace should ensure all inspections and notices have been completed prior to allowing the Carrier to operate the facility.

## **ENVIRONMENTAL CLEARANCE**

Licensing a site for a Facility is a discretionary action for Caltrans and requires compliance with the CEQA. If any federal approvals are involved, then the requirements of the NEPA must also be met. Procedures for environmental compliance are in Caltrans Environmental Manual. They are summarized below for convenience as applicable to site licensing.

When a local agency (city or county) is involved in the approval of the Facility, by issuing permits or other approvals, the local agency will be the Lead Agency under CEQA and Caltrans acts as a Responsible Agency. Caltrans will act as the CEQA Lead Agency when there is no local agency involvement or the local agency relinquished its approval authority over the project. Although Caltrans coordinates and reviews both CEQA and NEPA documentation, FHWA is responsible for NEPA compliance. FHWA requires that compliance with other federal environmental laws is incorporated into the NEPA documentation. Both CEQA and NEPA encourage the preparation of a single, joint environmental document to address the requirements of both CEQA and NEPA.

The District Environmental Planner is a core member of the DARC team, reviewing each proposal at the conceptual, preliminary and final phases. In addition, the Environmental Planner will review the environmental document for compliance and ensure all necessary permits from other agencies (e.g., the California Coastal Commission) are obtained by the applicant.

It is anticipated that all proposals for a Facility will fall under the Categorical Exemption/Categorical Exclusion (CE) criteria. However, any proposal that may cause significantly impacts the environment could require more evaluation in an Initial Study/Environmental Assessment (IS/EA). Depending on the results of the IS/EA, the proposal may result in a Negative Declaration (ND) /Finding of No Significant Impact (FONSI) or require a full Environmental Impact Report (EIR) /Environmental Impact Statement (EIS). The types of documentation are:

Categorical Exemption: is an exemption from the requirement of the (CEQA) for a class of projects based on a finding by the Secretary of Resources that the class of projects does not have significant effect on the environment. Categorical Exemptions are listed in Article 19 of the Guidelines for implementation of the California Environmental Quality Act (14 CCR 15000).

Categorical Exclusion: a category of federal actions which do not individually or cumulatively have a significant effect on the environment and for which neither an Environmental Assessment or an Environmental Impact Statement is required. Classes of projects, which qualify are listed in 23 CFR Part 771.

Initial Study: a preliminary analysis to determine whether an EIR or a ND must be prepared or to identify the significant environmental impacts to be analyzed in an EIR.

Environmental Assessment the NEPA equivalent of the Initial Study (IS).

Negative Declaration: is a written statement by the Lead Agency describing why a proposed project (that is not a CE) would not result in a significant effect on the environment.

The IS is attached to the ND as supporting documentation of the finding. A mitigated ND is prepared for a project that would have had a significant effect on the environment, but the effects were avoided or measures were incorporated into the project to reduce the effects below the level of significance.

Finding of No Significant Impact the NEPA equivalent of the Negative Declaration signed by FHWA.

Environmental Impact Report (EIR): is a detailed analysis of the environmental effects of the proposed project and project alternatives and the mitigation measures to avoid or reduce significant environment effects. The contents of an EIR are specified in Section 21100 of the CEQA and may refer to either a draft or a final EIR. The lead agency can not approve a project that will result in significant environmental impacts unless it makes a finding of overriding considerations.

Environmental Impact Statement (EIS) is an environmental impact analysis prepared pursuant to NEPA that determines whether the project will result in significant environmental impacts. The types of environmental issues considered in the EIS are similar to those considered in an EIR.

When there is federal involvement, there are other federal laws that must be complied with, if there could be an impact to environmental resources. These other laws include the Clean Water Act and the permits that it requires (Section 404 permits, Section 401 permit), federal Endangered Species Act and the consultations with federal agencies that is requires, the National Historical Preservation Act which protects archaeological and historic site, Section 4 (f) of the United States Department of Transportation Act which rigorously protects wildlife refuges, recreational areas and historic sites, protection of wetlands, etc. FHWA requires compliance with any of these laws and the issues must be addressed in the NEPA document. Basically the breadth and scope of studies are similar to those required by CEQA; the “standard” may be different from CEQA.

Proposals on Caltrans' property that involves the following items may require additional documentation or cannot be classified as a Categorical Exemption:

- Historical structures (bridges, tunnels, buildings)
- Archaeological sites
- Watershed property or tidal waters
- Rare, threatened, or endangered species' habitat
- Excavations more than 24” that could affect
- Hazardous waste sites
- Designated Scenic Highways

Some proposals may be subject to various standing permits and variances such as the National Pollutant Discharge Elimination System (NPDES) Permit (District specific) from the Regional Water Quality Control Board and the Variance for reuse of lead contaminated soils from the Department of Toxic Substances Control. Environmental Engineering staff (also a DARC member) can address these issues.

The Environmental Office may track environmental Commitments in “Permits, Agreement and Mitigation” (PAM). The PAM system allows Caltrans to verify that necessary environmental commitments are being carried out through all of the phases of the project, from Environmental to Design to Construction to Maintenance and back to Environmental. The goal is to create and maintain a statewide Environmentally Sensitive Area (ESA) database.

The Environmental Planner will review proposals for impacts on historic buildings or structures (this could include negative visual impacts to nearby historic buildings, structures or districts); paving, excavation or disturbance of previously undisturbed ground (for effects on plants/animals, archaeological sites or changes to storm-water runoff); presence of hazardous waste and any potential the Facility may have for creating hazardous waste on the property. The Landscape Architect reviews the proposal for visual impacts.

During the DARC review the Environmental Planner will check whether the property has been determined or is eligible to be a historic property under the National Register of Historic Places or the California Register of Historic Places; and if so, the proposal must be reviewed by HQ Environmental Program

Cultural Studies Office. This requirement is in response to Public Resource Code 5024.5 and is in addition to CEQA requirements.

Typical questions asked during the DARC are:

1. Is another public agency involved in the approval of the Facility? If not, then Caltrans is the Lead Agency.
2. Will the proposed project involve disturbance or excavation of the ground? If so, the project may have a potential effect on an archaeological site, historic district and/or important biological habitat.
3. Is the site on a list of known locations of hazardous materials? If so, the environmental document will be either a ND or EIR.
4. Could the proposal affect drainage or water quality?
5. Is the site on, adjacent to, or visible from a designated Scenic Highway?
6. Is the Caltrans structure (building, bridge, tunnel, etc.) an historic site?

It is important to note that even though the Carrier has the document prepared and it is reviewed by the public agency, Caltrans must review and render an independent judgment on environmental impacts and appropriate mitigation.

# **SITING GUIDELINES**

## **Siting Guidelines for Wireless Communications Facilities**

### **Introduction:**

The purpose of this document is to establish criteria for siting future public wireless communications facilities so as to lessen the impacts on the adjacent community and highway facilities. Included are considerations for preserving the operational safety as well as the functional and aesthetic qualities of the highway. Sites shall not adversely impact the safety and operations of Caltrans workers.

### **Elements of Policy:**

The following areas of concern need to be addressed for controlled access highways. Conventional highway siting will continue to be addressed under the permit process. Areas outside controlled access right of way will be sited in accordance with the Caltrans program managing the property being leased.

### **Official Policy established by the Design and Local Programs Program (DLPP) - July 1997:**

**Clearances from the traveled way:** Minimum distances from any proposed wireless facility to the traveled way of either the main line or ramp lines shall be as described in the Caltrans Highway Design Manual Section 309, "Clear Recovery Zones". Antenna attachments to existing Caltrans facilities will not be subject to Section 309. The manual may be purchased from the Caltrans Publication Unit or viewed from Caltrans web page: <http://www.dot.ca.gov/hq/opd/hdm/hdmtoc.html>

**Safety:** Access to the wireless facility for construction and maintenance shall only be from outside the controlled access right of way. Normally access shall not be allowed from the traveled way. Applicants will be required to access the right of way from established frontage roads or obtain agreements from adjacent property owners to allow access through private or other public properties. Service for power and telephones will also be from outside the controlled access right of way. When it is necessary to access the facility by passing through a Caltrans controlled access right of way fence, the Caltrans policy requires a locked gate. Antennas, once attached to Caltrans structures and adjusted, shall only be serviced or replaced if damaged by traffic, vandalism or an act of God. Caltrans shall only be liable for damage caused by Caltrans work forces.

**Site Compatibility:** District Landscape Architecture Offices (DLAO) will review proposed facilities for site compatibility (landscaping, scenic viewsheds, etc.). Siting shall not violate any other Caltrans standards, policies, or guidelines. The new facility must be aesthetically compatible with Caltrans and local aesthetic qualities. Facilities may be allowed if site design can be modified to reduce adverse visual effects. Site design must comply with DLAO requests. The facilities must be compatible with community desires; no facilities will be sited in areas which are objectionable to the local community. Sited facilities should not create a visual element that would be distracting to adjacent property owners and the traveling public. Above ground vaults should blend into the surrounding area as much as feasible. Antenna designs should be innovative so as not to attract special attention. Landscaping removal and replacement plans shall be approved by DLAO.

Facilities will not be permitted to be installed if they are visible from a designated or eligible State Scenic Highway.

*continued on next page*

**Structural Compatibility:** Any above ground wireless facilities (towers, vaults, etc.) shall be subject to Caltrans review to determine structural adequacy. If antennas are mounted on Caltrans facilities, the Caltrans facilities must be structurally adequate to support the attachments. Normally, such facilities as existing sign support towers, sound walls, and Caltrans towers will require only a minimum review.

**Communications Compatibility:** Proposed wireless equipment shall not interfere with existing or planned state communications systems within a two mile radius of the proposed wireless site. An intermodulation study shall be made at the expense of the wireless provider. The components and results of the study shall be approved by Caltrans prior to proceeding with the site licensing process.

**Highway Needs:** Shall not change the current or future use of the highway facility. Future construction needs may preclude installing a wireless facility at a given location and/or require the wireless facility to be relocated at the expense of the provider. The district should review future plans for modification of the highway system before agreeing on a site location for a proposed wireless facility.

**Exceptions:** The District Airspace Review Committee (DARC) is responsible for insuring compliance with these siting guidelines. The committee will process requests for exceptions to these guidelines to the Office Chief, Encroachment Exceptions, Design and Local Programs for review. Final approval shall be by the Federal Highway Administration (FHWA).

### **Specific Program Guidelines:**

#### Landscape and Aesthetic Design Requirements

Caltrans desires to make wireless communications facilities as inconspicuous as is reasonably possible; and to ensure a design compatible with the visual quality of the highway corridor and adjacent land uses.

1. Facility locations shall be selected to require a minimum amount of site disturbance.
2. The quantity of antennas approved along a corridor will not be allowed to impact the aesthetics and visual impact to the corridor.
3. To the maximum extent feasible, existing vegetation shall be preserved to provide visual screens and buffers.
4. Erosion and sediment shall be controlled. Sediment shall not be allowed to leave the facility site.
5. Architectural treatments, color coordination, new or replacement planting, and other visual screening treatments may be required.
6. Placement shall accommodate the need for plantings or other screening treatments between the proposed facility and adjacent land uses.
7. Where substantial screen planting or replacement planting is required, such work shall include an appropriate irrigation system and plant establishment for a period of up to one year.
8. The applicant shall provide computer generated photographic quality visual simulations (or other visual simulations) suitable to demonstrate the visual effects of the proposed facility.

#### References:

- California Department of Transportation, Highway Design Manual, Fifth Edition, Chapter 900, pages 900-1 through 900-14.
- California Department of Transportation, Guidelines for the Official Designation of Scenic Highways March 1996, pages 3-6 and pages 25-26.
- California Department of Transportation, Environmental Handbook, Volume 1, Chapter 2, Section 2-3.3, "Scenic Resource Determination."

#### Park and Ride Facilities

Any proposal by a wireless-communications carrier for a site on a state-owned park and ride facility (P&R) should consider the "Landscape and Aesthetic Design Requirements" previously described. The following should also be considered:

1. Whenever possible, wireless facilities should be placed in areas of the P&R facility that do not require taking up designated parking spaces.
2. If it is necessary to use existing parking spaces, only P&R facilities not operating at capacity should be considered. If the taking of a parking space or more requires the displacement of a commuter, the wireless facility should be placed elsewhere or not be licensed at that particular site.
3. Whenever parking spaces must be used for wireless facilities, those spaces ceded should be the ones least likely to interfere with traffic movement within the P&R facility.
4. Placement of the wireless facility should take into account the disabled commuters, who may be using the P&R, by not interfering with any possible movement they may need to take upon exiting their cars to change modes of travel, such as vanpools or transit, originating within the P&R or externally.

#### Maintenance Stations

1. When siting on non-highway facilities, service provider is responsible for maintaining all existing services during construction, as per encroachment permit requirements.
2. When installing wireless service equipment on state owned/maintained lighting or signal standards, the service provider is responsible for determining conduit/wiring requirements as per the Cal-OSHA Low Voltage Electric Safety Orders, Caltrans Standard Specifications and Plans, Caltrans Signal and Lighting Design Guidelines, the National Electric Code, and any other design guidelines that are used by Caltrans. The service provider is also responsible for installing any upgrades in conduits/wiring, including removing and replacing foundations, if necessary. Wind and seismic loading calculations and foundation designs of new towers to be installed on maintenance station grounds will be design checked.
3. No towers or poles will be installed on existing maintenance station structures without prior written approval of the District Deputy Director for Maintenance of designated representative.
4. Wind and seismic loading calculations and foundation designs of new towers to be installed on maintenance station grounds will be design checked.

5. To prevent Caltrans vehicles from damaging a wireless facility No less than four 8 foot long guard posts will be installed surrounding any new towers erected at a Maintenance Station. Posts will be no less than 6 inch diameter, and made of schedule 40 galvanized steel. Posts will be installed four feet below the finished grade of the structural section adjacent to the tower, with a 1 foot diameter concrete footings surrounding each post to a depth of no less than 3 inches below the bottom of the post. Below grade, posts will also be filled with concrete. A one inch circular concrete cap will be installed at the top of each post (This method is preferred over fencing the facility).
6. Towers or poles will be sited outside the turning radius of the largest piece of equipment used at the maintenance station (truck with low-boy trailer, snowplow, grader, etc.).
7. Antennas will maintain a 2 foot minimum vertical clearance from the highest piece of equipment used at the maintenance station (lift-mounted one-ton truck, truck with CMS/arrow board, spray rig, snow plow, etc.). The intent is for the top of the rig to avoid damaging (miss the bottom of) the antenna.
8. Storage of equipment and materials will not be permitted in the Maintenance Station grounds, outside of the carrier's enclosure or licensed enclosed space. Parking and landscaping may be excepted.
9. The placement of equipment cabinets shall not interfere with operations of the facility, interfere with access to any portion of the facility, nor compromise safety.
10. Maintenance pullouts shall not be of proximity that it interferes with acceleration into and deceleration from the traveled way.

#### Structures: Bridges and Poles [sign and lighting]

##### General

1. Encroachments should not be exposed to view and shall not be permitted on the exterior of a bridge unless they are enclosed and appear as an integral part of the bridge. Structures Maintenance may approve exceptions for unusual circumstances.
2. First preference: Locate the telecommunication equipment on separate poles, off bridge structures when possible.
3. Placement of telecommunications equipment shall be permitted on the exterior of bridge structures only when it is not feasible to place the encroachment off, or in the interior of, the structure. Applicants requesting conceptual approval for placing appurtenances on the exterior of bridge structures must show why it is necessary to use the exterior of a structure. A lower installation cost will not necessarily be considered justification for installing on the exterior of a bridge structure.
4. Condition at the site shall remain as safe as before the encroachment was installed.
5. The encroachments' design, installation and maintenance should not have adverse effect on State bridges structurally or aesthetically.
6. The ability to perform structures maintenance inspection repairs or other maintenance operation shall not be impaired by encroachment.
7. All proposals submitted should include bridge plans, right of way limits, and location of the encroachment.
8. Electrical and communication lines shall be encased in rigid metallic conduit. Electrical conduit shall be grounded according to the general order of the California PUC and the electrical safety order of Cal-OSHA.



### Installation on Bridge Structures

When there is no reasonable alternative to installing on the exterior of a bridge structure a permit may be granted when the encroachment conforms with the following provisions.

1. Conditions at the site shall remain as safe as before the encroachment is installed.
2. Equipment that may distract a vehicle operator from safe negotiation of the highway at or near a State Facility shall be prevented from placement on the State facility. This includes encroachments that may distract a driver when the equipment is serviced or maintained.
3. The ability to perform maintenance inspection, repairs or other maintenance operations shall not be restricted by the encroachment.
4. The life expectancy of the bridge shall remain unchanged.
5. The aesthetic architectural and historic value of the structure must be maintained.
6. Operating and maintenance of the encroachment must not interfere with traffic operations on or near the structure.
7. Wireless antenna panel should be placed behind the existing sign structures.
8. When there is no traffic sign attached to the bridge, the applicant should get conceptual approval before preparing the plans.
9. The Electrical or Communication Lines should be installed inside the bridge for box girder bridges or between the girders for bridges with no soffit. Conduits can be cored through abutment to the street and from there to the ground installation.
10. When there is not a soffit access opening, a design for the opening should be proposed.
11. No installation are allowed on POC. (Exception may be reviewed on case by case.)
12. Attachments shall not be placed where access and maintenance may be difficult or unsafe. Access and maintenance to existing elements shall not be limited or prevented in any way.
13. Additional elements, including conduits, wiring, and communications equipment at any structure shall not interfere with the capacity or performance of the existing system.

### Installation on Sign Structures

1. Installations are not permitted on the median signs.
2. Cables should be placed inside the sign poles. If this is not possible, the proposal should be so that the cables/conduit can not be viewed by passing traffic.

3. An antenna panel can only be installed behind the sign panel. Other types may be installed on top of the right post if aesthetically not disturbing.
4. The sign with added component should be design checked and calculations should be submitted to Structure Maintenance for verification with a copy of design code used for calculation.
5. Special elements may be considered for large existing Overhead Truss Type Structures. Work related to mounting attachments will avoid alterations near the structures main and connections including primary members, bolts, and welds.
6. New structures or mounting of special attachments to existing sign and lighting structures shall require analysis according to Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, 1994 by the American Association of State Highway and Transportation Officials.
7. All modified structures shall be considered for potential increase in vibration and fatigue and may be revised or returned to the original condition if warranted by the owner/operator.

#### Installation on Lighting Poles

1. Installation should be proportion to the size of the pole.
2. The combination of antenna (or camera) and the electric pole should be design checked.
3. All material should be dim, steel material should be hot dip galvanized.
4. Lighting structures both breakaway and non-breakaway types shall not be modified to accept additional attachments.
5. New structures or mounting of special attachments to existing sign and lighting structures shall require analysis according to Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, 1994 by the American Association of State Highway and Transportation Officials.
6. All modified structures shall be considered for potential increase in vibration and fatigue and may be revised or returned to the original condition if warranted by the owner/operator.

#### Traffic Operations, Electrical Systems

1. The minimum radial clearance between overhead utility lines and any wireless equipment mounted on a lighting standard shall conform to the Electrical Safety Orders.

Nominal Voltage (Phase to Phase)	Minimum Clearance Required (Feet)
600 .....50,000	10
over 50,000 .....75,000	11
over 75,000 .....125,000	13
over 125,000 .....175,000	15
over 175,000 .....250,000	17
over 250,000 .....370,000	21
over 370,000 .....550,000	27
over 550,000 .....1,000,000	42

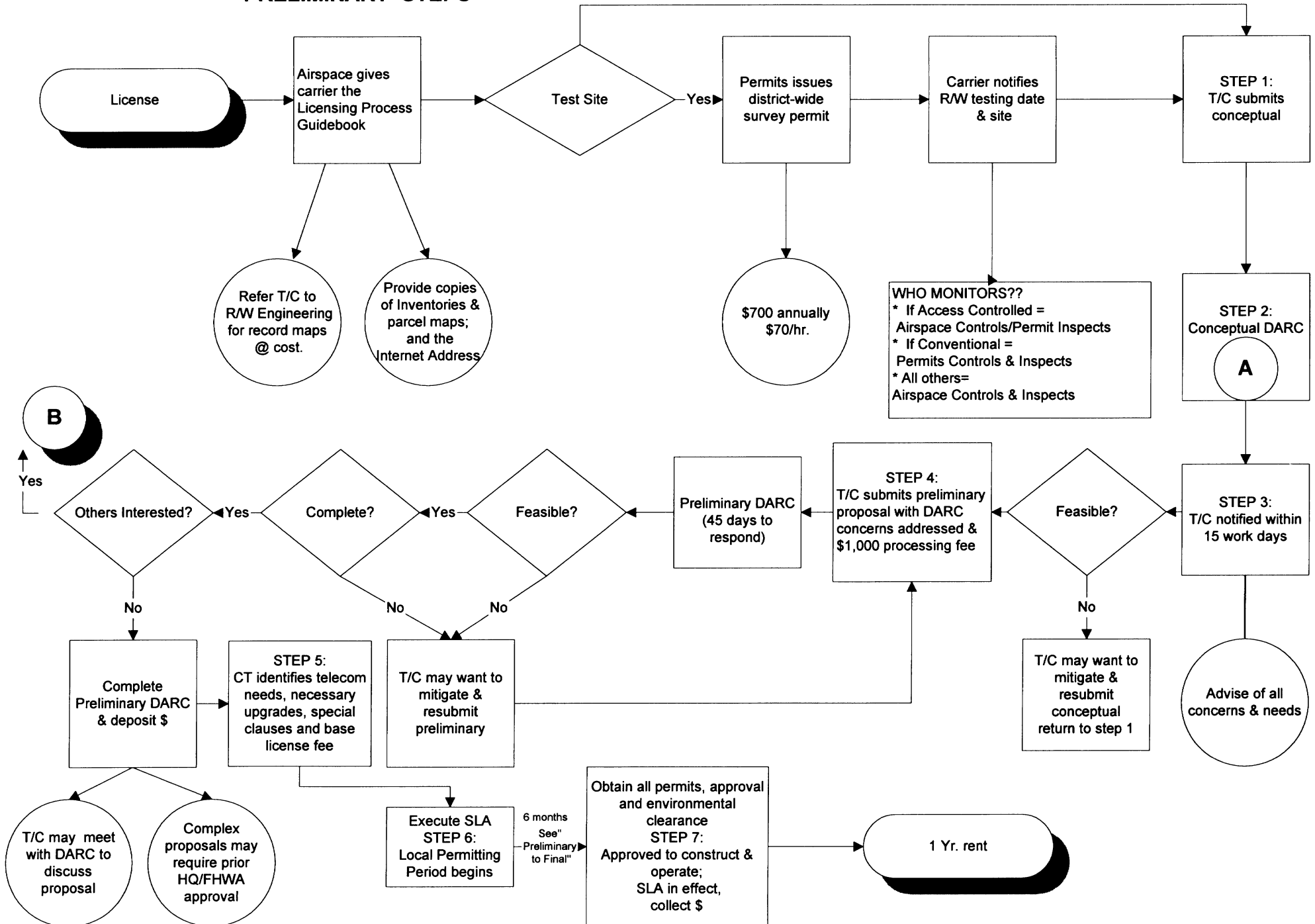
2. Placement of wireless equipment shall not interfere with the operation or obstruct the visibility of traffic signals, ramp meters, lighting, or other traffic control equipment.
3. Sharing of Caltrans conduit will not be permitted.
4. The electrical power circuits for Caltrans electrical facilities shall not be used for wireless communications facilities.

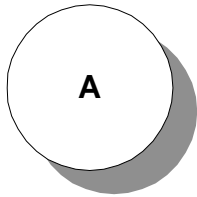
#### References

- California Administrative Code, Title 8 Industry Relations, Chapter 4: Division of Industrial Safety, Subchapter 5: Electrical Safety Orders (reference may be purchased through Barclay's Publishers #1-800-888-3600).
- California Department of Transportation, Standard Specifications
- California Department of Transportation, Standard Plans
- California Department of Transportation, Traffic Manual Chapter 9.

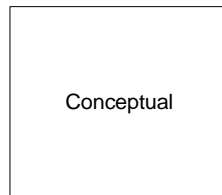
# EXHIBITS

# PRELIMINARY STEPS

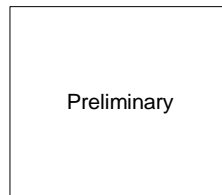




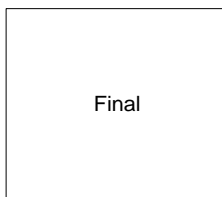
## DISTRICT AIRSPACE REVIEW COMMITTEE (DARC)



1. Does the idea make sense?  
Any objections?  
Any telecommunication needs, or required upgrades?
2. Highest best use-us there another development that would generate a higher rate of return?



1. What are the potential rents versus potential risks?
2. Are there others interested?
3. Review package-is it complete?  
Is the proposal feasible?  
Are all memebbers concerns adressed?  
Meet with T/C



1. What are the potential rents versus potential risks?
2. Are there others interested?

### Committee Members

#### Core:

Right of Way Airspace  
Traffic Operations  
Maintenance Operations  
Environmental

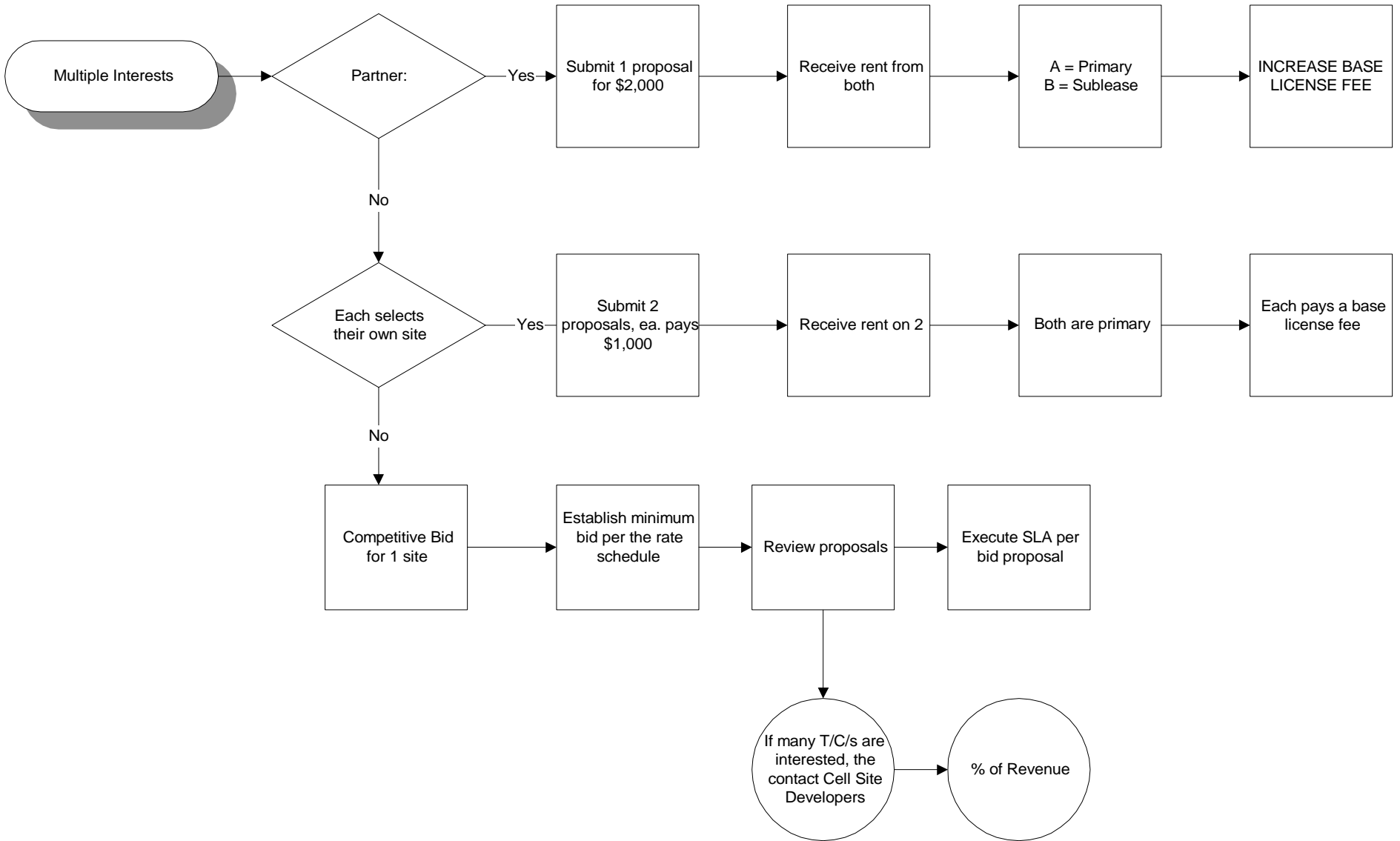
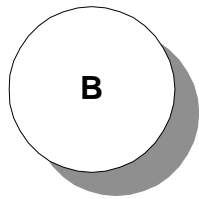
#### And:

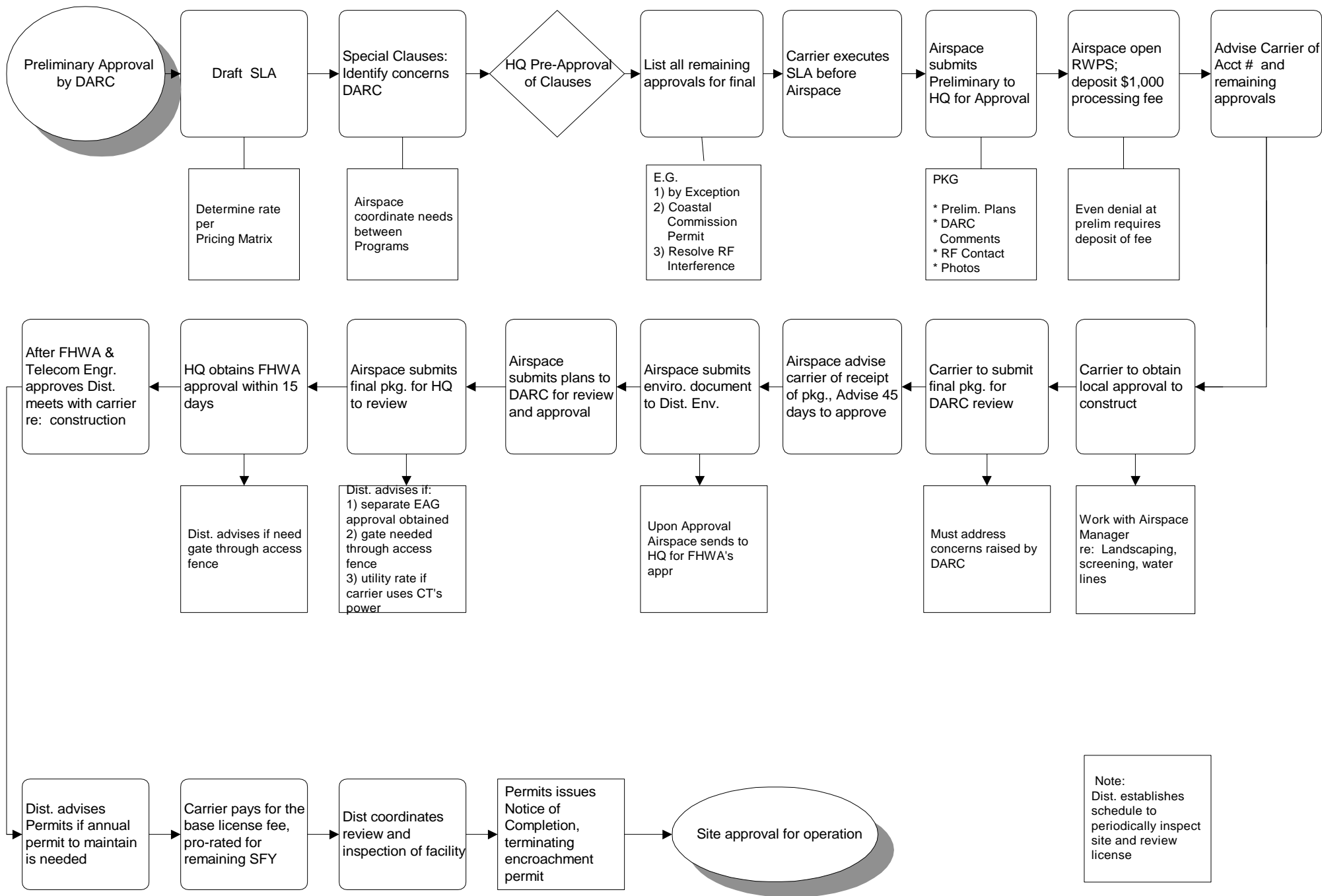
IF "Off System"  
Facilities

#### OR:

IF "On-System - operating  
and non-operating right of  
way"  
Project Development  
Landscape Architect  
and the Operator of the  
Facility

i.e. Park and Ride, Roadside  
Rests, Structures, Bridges, Signs,  
Poles, etc.







SLA No. \_\_\_\_\_

Dist.- Co.- Rte.- Parcel - Tenancy

Premises: \_\_\_\_\_

## **SITE LICENSE AGREEMENT**

Subject to the terms and conditions of the Master License Agreement ("MLA," 1997 form) between the undersigned Licensee and Licensor, Department of Transportation, the following described location is licensed to Licensee for unmanned telecommunications purposes:

1. Licensee: \_\_\_\_\_

2. Site Address/Description: \_\_\_\_\_

\_\_\_\_\_

3. Geographic Area Category: Prime Urban                      Urbanized                      Rural

4. Equipment Classification: Macrocell                      Minicell                      Microcell

5. Base Annual License Fee: \_\_\_\_\_  
(Fee to be increased 3 1/2%, effective each June 30, commencing June 30, 1998. Annual License Fee is due by June 30 each year. The initial License Fee will be prorated to the next June 30, and will be past due after ten days of the Commencement Date.)

6. Effective Dates: The "Execution Date" is the date Licensor signs this Agreement. The "Commencement Date" is the date of the Encroachment Permit for construction, not to be later than six months after the Execution Date, unless extended per the terms of the MLA).

7. Local Licensor Contacts for access or emergencies (names, titles, phone, pagers, etc.)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Licensee will be responsible for all overtime charges)

8. Local Licensee Contacts for access or emergencies (names, titles, phone, pagers, etc.)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. Term/Renewals: As provided in Master License Agreement, unless a shorter term or number of renewals is specified as a special term or condition.

10. Pursuant to MLA Section 4 (g), Licensor advises it is (likely) (unknown if) Licensor will desire to retain the tower/ancillary improvements at the conclusion of this Site License.

11. Special terms, conditions or other notes are attached and initialed by the parties. Examples include any Licensor use, known hazardous substances, special access, maintenance responsibilities, permit requirements, or co-location requests.

\_\_\_ Check here if there are special terms or conditions to this agreement.

## **ATTACHMENTS**

For Preliminary Approval of this Site License Agreement, the following documents must be attached:

- A. Preliminary description and/or map(s) of premises and site licensed, including location of equipment, access and utility routes.
- B. Estimated Equipment Technical Specifications.

For Issuance of the Encroachment Permit to allow construction, the following documents will be needed in addition to approval of the final copies of A and B above:

- C. Copy of Local Building Permit and/or local governmental approvals.
- D. Environmental Approvals from FHWA.
- E. Any legal description of the site developed by Licensee or submitted to the PUC.
- F. Recording: if Licensee requires recorded notice, Licensee should submit a complete form, a copy of which will be included as an exhibit to this Site License. Licensee is responsible for obtaining any necessary legal description.
- G. Planned regular maintenance schedule.

DATED: \_\_\_\_\_

LICENSEE: \_\_\_\_\_

BY: \_\_\_\_\_

ITS: \_\_\_\_\_

DATED: \_\_\_\_\_

("Execution Date")

LICENSOR: DEPARTMENT OF TRANSPORTATION

BY: \_\_\_\_\_

ITS: DISTRICT AIRSPACE MANAGER

**ANNUAL BASE LICENSE FEE, adjusted 3.5% beginning July 1, 1998**  
 (rounded to the nearest whole dollar and divisible by 12)  
*July 1, 1997 - June 30, 2012*

	July 1, 1997	July 1, 1998	July 1, 1999	July 1, 2000	July 1, 2001
<b>MACROCELL</b>					
Prime Urban (Cat 1)	\$21,000	\$21,732	\$22,500	\$23,280	\$24,096
Urban (Cat 2)	\$16,200	\$16,764	\$17,340	\$17,964	\$18,588
Rural (Cat 3)	\$12,000	\$12,420	\$12,840	\$13,308	\$13,776
<b>MINICELL</b>					
Prime Urban (Cat 1)	\$18,000	\$18,636	\$19,260	\$19,956	\$20,652
Urban (Cat 2)	\$15,000	\$15,528	\$16,080	\$16,632	\$17,208
Rural (Cat 3)	\$12,000	\$12,420	\$12,852	\$13,308	\$13,776
<b>MICROCELL</b>					
Prime Urban (Cat 1)	\$15,000	\$15,528	\$16,068	\$16,632	\$17,208
Urban (Cat 2)	\$12,000	\$12,420	\$12,852	\$13,308	\$13,776
Rural (Cat 3)	\$9,900	\$10,248	\$10,608	\$10,980	\$11,364
	July 1, 2002	July 1, 2003	July 1, 2004	July 1, 2005	July 1, 2006
<b>MACROCELL</b>					
Prime Urban (Cat 1)	\$24,936	\$25,812	\$26,712	\$27,648	\$28,620
Urban (Cat 2)	\$19,236	\$19,908	\$20,616	\$21,336	\$22,080
Rural (Cat 3)	\$14,256	\$14,748	\$15,264	\$15,804	\$16,356
<b>MINICELL</b>					
Prime Urban (Cat 1)	\$21,384	\$22,128	\$22,896	\$23,700	\$24,528
Urban (Cat 2)	\$17,808	\$18,444	\$19,080	\$19,752	\$20,448
Rural (Cat 3)	\$14,256	\$14,760	\$15,264	\$15,804	\$16,356
<b>MICROCELL</b>					
Prime Urban (Cat 1)	\$17,820	\$18,444	\$19,080	\$19,752	\$20,448
Urban (Cat 2)	\$14,256	\$14,760	\$15,264	\$15,804	\$16,356
Rural (Cat 3)	\$11,760	\$12,168	\$12,600	\$13,032	\$13,488
	July 1, 2007	July 1, 2008	July 1, 2009	July 1, 2010	July 1, 2011
<b>MACROCELL</b>					
Prime Urban (Cat 1)	\$29,628	\$30,660	\$31,728	\$32,844	\$33,996
Urban (Cat 2)	\$22,848	\$23,652	\$24,480	\$25,332	\$26,208
Rural (Cat 3)	\$16,932	\$17,520	\$18,132	\$18,768	\$19,428
<b>MINICELL</b>					
Prime Urban (Cat 1)	\$25,392	\$26,280	\$27,204	\$28,152	\$29,136
Urban (Cat 2)	\$21,156	\$21,900	\$22,668	\$23,460	\$24,276
Rural (Cat 3)	\$16,932	\$17,520	\$18,132	\$18,768	\$19,428
<b>MICROCELL</b>					
Prime Urban (Cat 1)	\$21,156	\$21,900	\$22,668	\$23,460	\$24,276
Urban (Cat 2)	\$16,932	\$17,520	\$18,132	\$18,768	\$19,428
Rural (Cat 3)	\$13,968	\$14,460	\$14,964	\$15,480	\$16,020

## PROPOSAL CHECKLIST

CONCEPTUAL: A Carrier's formal letter to Airspace detailing the proposed facility, including:

1. Name of Caltrans' contacts to date and issues discussed to date, if any, regarding the proposal.
2. Description of the proposed facility (type, height, area needed).
3. Location - site address, route, or other identifier (e.g., SW corner of the Tahoe City Maintenance Yard) and a map depicting the proposed Facility.
4. Diagram of the proposed facility depicting how access and utilities will be obtained.
5. Any additional information that might be helpful in "visualizing" the proposal and its potential impacts on the surrounding facilities, i.e., altered photos showing the proposed facility.
6. Narrative describing the proposed facility, time frame, and maintenance schedule.

PRELIMINARY: The Carrier's formal package to Airspace detailing the proposed facility, including:

1. Copy of the conceptual approval letter and any follow-up letters or discussions related to the issues raised during the conceptual phase.
2. Plans (one full size original, a minimum of four reduced to 8.5" x 11") detailing the exact location, size, and method of installation for all permanent improvements, including:
  - A plot plan, property dimensioned, showing the location of the proposed facility (noting additional area needed for construction, if applicable), and its relationship to any and all existing facilities at the site.
  - Technical specifications on the radio transmissions and equipment that will be used.
  - Landscaping details to include methods to prevent soil erosion or to protect slopes.
  - Fencing, sidewalks, signs and other minor improvements.
  - Access way, parking areas and identification of any areas to be paved or striped (including the materials to be used).
  - Utilities (including trenching specifications).

3. Approximate cost of project, including construction, permanent improvements to site, removal improvements (not including the radio equipment), and required upgrades.
4. Project time frame.
5. Lease term requested and any option periods needed. (Standard is ten years with three 5-year options.)
6. Carrier's name: what entity goes on document as licensee.
7. Name of the Project Manager (employee, broker, or consultant) representing Carrier authorized to negotiate with Caltrans and assist District Airspace Manager (Airspace) in processing the document.
8. Name of the Carrier's Radio Frequency (RF) Engineer who will work with Office of Radio Communications Engineers (Telecom Engr) regarding review of plans and specifications and possible sharing of the facility.
9. Narrative describing how installation and construction will be performed in order to minimize the impact on Caltrans' operations (e.g., traveling public, commuters at a park and ride, workers at a maintenance station).
10. A non-refundable administration fee of \$1,000.00 to cover the staff costs related to the review of the preliminary proposal.
11. Additional fees may be charged by Department of General Services (DGS) if studies of potential interference are required because of the proximity of the proposed facility to other telecommunications facilities operated by other governmental entities.
12. Copy of the district's permit to test.
13. Further details of the monthly maintenance schedule of activities (e.g., the types of vehicles and equipment to be used, general locations of the vehicles and equipment during typical maintenance operations, identification of any vehicles and equipment that will be stored on the site).
14. Anticipated method of installation for Caltrans' equipment - and if at the time of Carrier's initial construction, identification of who will do the installation (and approximate cost if by the Carrier).
15. Responses to all the issues raised during the conceptual DARC.

FINAL: Carrier submits final construction plans detailing excavation, trenching and utilities, addressing all concerns from the preliminary DARC. Airspace, HQ Telecom and FHWA all requests a final review. A formal letter from Airspace to Permits, with a copy to the Carrier, stating that the Carrier has complied with all requirements to obtain permission to construct, including:

1. Environmental Document.
2. Final DARC review of construction plans.
3. Building Permit.
4. Application for Encroachment Permit.
5. FHWA and Telecom Engr final approval of the construction plans.
6. Annual maintenance permit to maintain the equipment located inside the right of way.
7. Copy of the legal description submitted to Public Utilities Commission (PUC).
8. Payment of the annual base license fee through the remaining state fiscal year (June 30th).
9. Identification of Caltrans equipment to be installed on the facility.
10. Responses to all the issues raised during the preliminary DARC.
11. Final construction schedule - who, what, when, where.

## **PLANS SUBMITTAL**

CONCEPTUAL: No plans are required as this phase is just to determine the feasibility and availability of a Caltrans parcel for a facility. (Refer to Proposal Checklist for submission requirements).

PRELIMINARY: The following items must be included on the preliminary plans of the proposed facility:

1. State Highway or Interstate Route number, milepost and direction.
2. Municipality and county.
3. North arrow, scale latitude and longitude.
4. Location of adjacent streets for alternate access location.
5. Right of way line (include copy of Caltrans right of way record map when utilized).
6. Location of adjacent setback of proposed structures (monopoles, towers, shelters, equipment, conduits, fencing, and parking).
7. Identification of the safety clear recovery zone if within access control (include calculation).
8. Location of any existing Caltrans structures (i.e. buildings, equipment, guiderails, access roads, columns).
9. Identify topography, including slopes within access control area.
10. Location of aerial and underground utilities (fiber optic, electrical, telephone, etc.), and the proposed method of accessing utilities from outside the access control area.
11. Location and setback from bridge structures (include bridge number).
12. Block, lot number, and lot lines of adjacent lots (include tax maps) and identify current use/improvements on adjacent property.
13. Existing landscape (outline of vegetation) with landscaping to be proposed and/or trees to be removed.
14. Height of the structure (monopole/tower) and antenna elevation.

15. Location of existing and proposed access points, driveways, and parking areas.

Plans should address all issues raised by the DARC during the conceptual review and any variations from the official Siting Guidelines and the Caltrans Design Manual.

FINAL: In additional to the information above, the following items must be included on the final plans of the facility:

1. Excavation plans for the monopole/tower, conduits, equipment shelters, and other structures.
2. Landscape plan, including irrigation/drip system and, if applicable, soil erosion and sediment control (include elevations, details showing architectural treatment, colors of the various facility components, etc.)
3. Curbing, sidewalks, stairs, driveways - existing and proposed (including curblane opening, driveway width, and alignment with respect to the adjoining highway or local road).
4. Include construction materials for #3, i.e. concrete, gravel, pavement.
5. Signs: regulatory, warning, directional, and private.
6. Highway striping, shoulder widths, slope, and fencing.
7. Dimension from the right of way line to the edge of pavement.
8. Distance of nearest traffic signal, ramp, or access point if less than 250 feet.
9. Plans for construction and maintenance (including a construction schedule and an “estimated” maintenance schedule).
10. Construction and attachment details, including design criteria and material specifications.
11. Details of equipment to be used to transmit and receive radio signals (include height, location on the monopole/tower, conduit, frequency, power).

Plans should address all issues raised by the preliminary DARC review and by other approving entities (FHWA, Telecom Eng, etc.) and any variations from the official Siting Guidelines and the Caltrans Design Manual.



## **SUMMARY OF THE MASTER LICENSE AGREEMENT TERMS and CONDITIONS**

**USE:** Wireless Telecommunications Facilities, typically a monopole or tower, and an equipment shelter.

**TERM:** Master License Agreement – 5 years, ending June 30, 2002. All future Site License Agreements will comply with new terms and conditions. Site License Agreement – ten years with three 5-year options in accordance with the terms of the current Master License Agreement.

**RATE:** Annual Base License Fee per a two-tiered matrix for location and equipment with adjustments and reevaluation.

**FEES:** Administrative and permit fees to cover the costs of surveys, inspections and preliminary/final reviews of the proposals.

**INITIAL OPTION:** Six month “permitting” period for the carrier to obtain all necessary reviews and approvals, including Federal Highway Administration’s (FHWA), required for construction; which can be extended at full rent.

**COLOCATION:** Where physically possible and desired by other carriers, subject to the internal review and approval by the Department and FHWA. Collocatee who shares the same equipment building or cabinet and the same monopole or tower will pay a rate based on the higher of a) 50% of the gross monies paid to the primary licensee, or b) 50% of the annual base license fee. Carriers who share the same monopole or tower will pay separate annual base license fees based on the square footage of the fenced area for their equipment and/or the number of antennas placed on the joint tower or monopole.

**IMPROVEMENTS:** At the Department’s option, the ownership of the tower or monopole can be transferred to the State at the termination or cancellation of the site license agreement. If the carrier cancels or terminates the agreement, The Department can keep the improvements (tower or monopole) for its continued use without payment. If The Department cancels or terminates the agreement, but needs the improvements (tower or monopole) for its continued use, The Department will credit the carrier with the unamortized cost of the improvements, up to \$60,000, for the first 10 years.

**EXTENSIONS:** At the end of each term (10, 15, and 20), the District Airspace Review Committee will convene if the carrier has advised that it would like to extend the site license agreement, to ensure that the use will not interfere with any current or future operations.

**CANCELLATION:** The Department can cancel the SLA if there is a conflicting transportation project (e.g. widening a nearby ramp) or operation (e.g. interference with a nearby electronic toll collection facility). The Department will assist the carrier with the location of another suitable facility, and credit the carrier with the unamortized costs of improvements, up to \$40,000, for the first five years. Carrier can cancel the SLA for commercial reasons and pay damages to the Department equal to 18 months of rent, or the remaining term of the SLA, whichever is less.

**CALTRANS RADIO NEEDS:** The Department reserves the right to share space with the carrier by placing its equipment \* on the top of the tower or monopole, and within the equipment building or to place an equipment cabinet on the foundation. a) five square foot area on the foundation for an equipment cabinet, or a 28 square foot area of vault space, b) room on the top of the monopole or tower for a 42", 20 pound omni-directional "bat" antenna.

**LIABILITY:** The Department will be held harmless from all claims relating to carrier's use of property or equipment, and Carrier will have a \$5,000,000 insurance policy.

**OTHER:** Standard array of legal clauses (defaults, assignments, notices, California law, prevails, repair notice, hazardous materials restrictions) that are similar to standard airspace lease agreements.

**FINANCIAL STATEMENTS:** Carriers will provide copies of their annual financial statements.

## SITE LICENSE AGREEMENT - SPECIAL CLAUSES

### LICENSOR'S USE:

1. Licensor will immediately exercise its right to share the facility with Licensee as follows:  
Who will install: \_\_\_\_\_ (include time frame)  
Estimated cost: \_\_\_\_\_  
Payment within \_\_\_ days of receipt of invoice, paid by District Traffic Operations/Maintenance Telecommunications Office.  
Licensor's use (tower, equipment area, conduit) is identified on the approved construction plans.
2. Licensor's equipment installed at this site will be a 880 MHz mobile repeater.
3. Licensee will install # surveillance cameras and its supporting equipment describe at height of the tower/monopole.
4. The State has no known telecommunications needs at this site, but reserves for the future its right to collocate with existing users.

### ACCESS:

5. Access will be \_\_\_\_\_ describe how and where \_\_\_\_\_. Licensee will maintain the access way for ingress and egress to the facilities free of dirt, litter, and debris. Access is noted on the approved plans for construction.
6. Licensee will provide and maintain their own lock and key for the existing gate.
7. The premises has a paved area \_\_\_\_\_ describe where \_\_\_\_\_ that will be used for parking of all construction and future maintenance vehicles. Parking is noted on the approved plans for construction.
8. As access to the (tower) (antenna) (equipment) is from within access control, Licensee must receive permission from the District Permits Office prior to installing, maintaining, inspecting, modifying any of the equipment. Such request will be in compliance with the Permits Manual. Licensee further acknowledges that no person, employee, vehicle, equipment will be allowed at the facility that is located within the access control without complying with all the terms of the permit, including appropriate safety measures such as traffic controls. If this provision is violated at any time, Licensor may immediately cancel this Site License.

#### MAINTENANCE:

9. In addition the requirements in the Master License Agreement to keep the area around the equipment and tower free of dirt, litter, debris and graffiti, Licensee will maintain describe (i.e. landscaping, slopes, fencing, sprinklers, removing graffiti within 24 hours)
10. Licensee will comply with the (local agency's name) siting requirements describe, i.e. aesthetic issues \_\_\_\_\_ for similar type facilities, and will submit these plans to Licensor for review and approval.
11. Licensee will coordinate construction of their facility with the Caltrans consultant who will be responsible for the construction of a Caltrans project (i.e. an adjoining paving project, widening the park and ride lot, replacing signs, seismic retrofit).

#### HAZARDOUS MATERIALS:

12. There are (known) (unknown) hazardous substances at this location. (Select one).

#### PERMITS:

13. In addition to the Encroachment Permit to construct, the Licensee will be required to obtain and keep on file an active maintenance utility permit to maintain equipment within access control.
14. No additional permits from the District Permits Office will be required for this facility once the Notice of Completion of the Encroachment Permit is issued.

#### COLOCATION:

15. There is a mutual agreement between the Licensee and (Carrier's name) who will collocate as a (sub-user) (direct-user) at this location subject to all reviews/approvals.

#### SITE:

16. Licensee will enclose the (equipment area) (tower) with a security fence dimensions, material, accessories \_\_\_\_\_.
17. Licensee acknowledges Licensor's electronic toll collection equipment is in the vicinity, and Licensee's use of this site, including radio frequency, will not interfere with Licensor's toll collection facility.

18. Utility Submetering and Estimated Payment: Licensee has requested use of Licensor's power at this Site as there is no direct utility power available. Such request is subject to approval by the Encroachment Permit by Exception Committee, and if approved, Licensee will be solely responsible for insuring all uses of Licensor's power comply with the requirements of the California Public Utility Commission, Licensor's supplying utility company, and additional requirements of Licensor. Licensee agrees to defend, indemnify and hold Licensor harmless from any action or claim challenging Licensee's use of Licensor's power, and waives any claims against Licensor for electrical outages or interruptions.

Licensee shall install a submeter at the Site and shall pay as an additional fee for the cost of utility service provided Licensee annually as part of the annual Base License Fee. The parties agree the annual Base License Fee shall be increased by \$600 for utility service

By June 1<sup>st</sup> of each year during the SLA term, Licensor and Licensee shall jointly calculate any necessary adjustment to the utility charge portion of the annual license fee based on readings from the utility meter at the Site and the rates currently charged by the applicable utility. If the parties cannot agree on the amount of the Utility Charge, it shall be submitted to an arbitrator reasonably acceptable to both parties.

19. Licensee will provide Licensor with as built plans to include photographs of the site and location of the utilities within 30 days of construction.

## **DETERMINING THE BASE LICENSE FEE**

### #1 - Single CARRIER on a site:

CARRIER wants to install a facility at a maintenance station wherein the fenced area would include a prefabricated building 230 square feet, supporting foundation and a monopole. Total fenced area is 965 square feet. The monopole will support three antenna sectors with 4 antennas each for a total of 12 antennas. The site is in a yellow area (urban) in Santa Clara County. Base License Fee for a prime urban macrocell site is \$21,000 year.

### #2 - Colocation Proposal (Sub User)

Same situation as #1, but a second CARRIER wants to share the space in the prefabricated building and put one antenna on the monopole. This is a Sub-User and the Base License Fee is 50% of what is paid to the First CARRIER or 50% of what the pricing matrix would establish for the Second CARRIER. In this case, the Base License Fee per the pricing matrix is prime urban and microcell (1 antenna) which is \$15,000. 50% is \$7,500 year. Note: the Second CARRIER can put up to 3 antennas on this site for the same Base License Fee.

### #3 - Colocation Proposal (Direct User)

Same situation as #1, but a second CARRIER wants to share the monopole/tower and mount six antennas on it but have their own space for their equipment in a prefabricated building that will be fenced. Total fenced area is 400 square feet. This is a Direct-User and the Base License Fee is 100% of the pricing matrix (as if the Second CARRIER were on the site by themselves). In this case, the Base License Fee per the pricing matrix is prime urban and microcell (6 antenna) which is \$18,000.

Subsequent CARRIERS are treated the same, there is no reduction in the base license fee charged to the previous CARRIERS at the site.

### #4 - Colocation within a CALTRANS facility

CARRIER wants to utilize a 25 square foot area within an existing equipment building and place one antenna on an existing monopole. The geographical area is prime urban.

This would result in a microcell category for a \$15,000 annual base license fee. However, colocation rate is only 50% when the CARRIER shares both the equipment area and the monopole/tower (even if the building is CALTRANS')

#### #5 – Multiple sites by one CARRIER within a corridor

CARRIER wants to install six antennas at various locations within a corridor i.e. at a lightpole, a directional sign, on a bridge/overcrossing, within an interchange, on a toll facility plaza and at a maintenance turnout. The geographical area is urban and the equipment areas will not be fenced. There are no monopoles or towers at four of the sites as the antennas are mounted on CALTRANS structures, fixtures, or buildings. At the other two sites the CARRIER will mount the antennas on a small pole. Each site will have one omni antenna and one microwave antenna.

Each site is classified as a minicell (2 antennas) as long as the total square footage for the equipment itself does not exceed 300 square feet. The total area reserved for the CARRIER including conduit, parking, concrete foundation should be reviewed to ensure the minicell category is correct.

Each site's Annual Base License Fee is \$12,000. There is no discount for multiple sites in a corridor, nor can all sites be classified as one facility (six sites times 2 antennas each).

**Conceptual Proposal  
License Caltrans' Owned Property  
for Telecommunications (Wireless) Facilities**

-CONFIDENTIAL-

DATE \_\_\_\_\_

TO: District \_\_\_\_ Airspace Review Committee

Attn: Airspace Manager, \_\_\_\_\_

Firm's Name: \_\_\_\_\_

Representative's Name: \_\_\_\_\_

Representative's Phone Number: \_\_\_\_\_

INTERESTED IN LICENSING A SITE (Please use one form per site):

Address, description, location: \_\_\_\_\_

County/Route/PostMile (if applicable): \_\_\_\_\_

Reference number on inventory (if applicable) \_\_\_\_\_

Current use (if ascertainable) \_\_\_\_\_

Proposed use (vault, antenna, tower): \_\_\_\_\_

Proposed area needed (width, depth and height): \_\_\_\_\_

How is independent access available? \_\_\_\_\_

How will power be provided? \_\_\_\_\_

Telecommunication facilities on site now (if any) \_\_\_\_\_

Need site by (time frame) \_\_\_\_\_

Option period to obtain approvals and clearances? (Approximate number of months) \_\_\_\_\_

Construction period? (Approximate number of months) \_\_\_\_\_

Willing to colocate or allow colocation? \_\_\_\_\_

Willing to provide the Department with space, services, capacity? (Explain) \_\_\_\_\_

Is firm a licensed carrier? \_\_\_\_\_

Is representative an employee of the firm or a consultant/broker? \_\_\_\_\_



Note 1: It is not necessary to submit preliminary plans or specifications at this time but a simple sketch or drawing of the site and possible location of the facility is encouraged.

Note 2: This format is a guide of the type of questions the District Airspace Review Committee may need answered in order to determine the feasibility and compatibility of a telecommunications facility.

*This expression of interest will not constitute notice of intent to license under the Master License Agreement. Caltrans reserves the right to deny any and all requests for access in accordance with its District Airspace Review Committee's guidelines. Approval does not constitute notice of intent to lease but rather approves the site for consideration of leasing to any and all interested parties through the Airspace Leasing process.*

**“SAMPLE”  
DARC COMMENTS**

Maintenance

“Request is approved as proposed”

OR

“Installation and operation shall not result in the removal of any existing landscaping. Any added maintenance costs resulting from installation and operation shall be the responsibility of the requestor”

Traffic Investigations

“Maintenance should be consulted regarding site”

OR

In addition to trees, no existing bushes or shrubs should be removed since they provide a visual barrier”

Permits

“Locate where least visible to traffic”

Environmental Planning

“Request is approved providing that there will be no biological or cultural resources that will be impacted”

OR

“Request is approved”

## **DEFINITIONS used by the TELECOMMUNICATIONS INDUSTRY**

Analog Technology: The traditional method of modulating radio signals to carry information. Voice messages are electronically replicated and amplified as they are carried from the transmitting antenna to the receiving antenna.

Antenna: Any system of wires, poles, rods, reflecting discs, or similar devices used for the transmission or reception of electromagnetic waves.

Band: A clearly defined range of radio frequencies dedicated to a particular purpose.

Bandwidth: A relative range of frequencies that can carry a signal without distortion on a transmission medium.

Basic Trading Area (BTA): A service area designed by Rand McNally and adopted by the FCC to promote the rapid deployment of PCS providers. There are 493 BTAs in the United States.

Cell: The basic geographic unit of a cellular system, and the basis for the generic industry term "cellular". Each cell is equipped with a low powered radio transmitter/ receiver. By controlling the transmission power, the radio frequencies assigned to a cell can be limited to the boundaries of that cell. When a cellular phone moves from one cell toward another, a computer at the Mobile Telephone Switching Office (MTSO) monitors the movement and at the proper time, transfers or hands off the phone call to the new cell and another radio frequency. The handoff is performed so quickly that is not noticeable to the callers.

Capacity Site: Shorter telecommunications structures that cover smaller areas with amore concentrated demand. Capacity sites serve to increase the capacity when surrounding sites have reached their practical channel limits.

Coverage Site: Higher telecommunications structures covering a larger geographical area, but with a lower service demand. Coverage sites serve to expand coverage in large areas or in areas with difficult terrain and to enhance coverage for portable systems. Coverage sites allow users to make and maintain calls as they travel.

Cellular Geographical Service Area (CGSA): The actual area in which a cellular company provides cellular service, usually smaller than the MSA surrounding it.

Channel: A path along with a communications signal is transmitted.

Code Division Multiple Access (CDMA): a spread spectrum approach to digital transmission wherein each conversation is digitized and then tagged with a code. The mobile phone is then instructed to decipher only a particular code to pluck the right conversation off the air.

Digital Technology: Data, including voice messages, are converted into digits that represent sound intensities at specific points in time. The two forms of digital technology, CDMA and TDMA, render multiple access over one frequency or channel.

Electromagnetic Fields (EMFs): Though referred to as radiation, EMFs do not actually radiate from a source. They are best described as local electric and magnetic fields that envelop the surrounding space. The most common source of EMFs is from the movement and consumption of electric power - transmission lines, household appliances electronic devices and lighting.

Hertz: A measurement of electromagnetic energy, equivalent to one “wave” or cycle per second. (Megahertz - MHz: Millions of Hertz)

Major Trading Area (MTA): A PCS area designed by Rand McNally and adopted by the FCC. There are 51MTAs in the United States.

Metropolitan Statistical Area (MSA): An MSA denotes one of the 306 largest urban population markets as designated by the US government. Two cellular operators are licensed in each MSA.

Mobile Telephone Switching Office (MTSO): The central computer that connects a cellular phone call to the public telephone network. The MTSO controls the entire system’s operations, including monitoring calls, billing and handoffs.

Radiofrequency Radiation (RFR): One of several types of electromagnetic radiation consisting of waves of electric and magnetic energy moving together through space. These waves are generated by the movement of electrical charges. For example, the movement of a charge in a transmitting radio antenna, i.e. the alternating current, creates electromagnetic waves that radiate away from the antenna and can be picked up by a receiving antenna.

Stealth Sites: Sites architecturally blended into the existing environment e.g. hidden in a church bell tower, surrounded by a water tower, covered by a silo, disguised as a fir tree. Wherever these antennas are, nobody can see that they are antennas.

Telecommunications Facilities: Communications towers, antennas and the necessary appurtenances. A land use that sends and/or receives radio frequency signals, including antennas, microwave dishes or horns, structures or towers to support receiving and/or transmitting devices, accessory development and structures, and the land on which they are all situated.

Time Division Multiple Access (TDMA): A method of digital wireless communications transmission allowing a large number of users to access (in sequence) a single radio frequency channel without interference by allocating unique time slots to each user within each channel.

*Source: "Telecommunications Information, A Reference Guide", October 30, 1996, Keith International*

## SAMPLE MEMORANDUM TO THE DARC

**TO:** DISTRICT AIRSPACE REVIEW COMMITTEE

ATTN: \_\_\_\_\_

Date:  
Co-Rte-PM:  
FLA No.:  
Location:

Applicant:

**FROM:** \_\_\_\_\_ Airspace Manager

**SUBJECT:** REQUEST FOR AIRSPACE COMMITTEE REVIEW

☐ CONCEPTUAL      ☐ PRELIMINARY      ☐ FINAL

Please review the attached map for the above referenced Airspace parcel. The use contemplated is: \_\_\_\_\_

A. A formal meeting is scheduled for \_\_\_\_\_  
(date, time, location)

B. Modification or new construction on an existing site. Describe:

\_\_\_\_\_  
\_\_\_\_\_

**PLEASE SUBMIT YOUR REPLY BEFORE \_\_\_\_\_ USING THE AREA BELOW.**

1. Request is approved \_\_\_\_\_
2. Request is approved with the following conditions: \_\_\_\_\_
3. Request should be denied for the following reasons: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If you have no comments, please check ☐ if you want to see the final plans.

4. I have no objections to the proposed project.
5. Please see my attached comments.
6. I (or a representative) will attend the DARC meeting.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Attachments

**DEPARTMENT OF TRANSPORTATION**

DISTRICT 7, 120 SO SPRING STREET  
LOS ANGELES, CA 90012  
TDD (213 ) 897-6610

**SAMPLE MEMORANDUM TO THE CARRIER**

Date

Location

Carrier:

Carrier Representative

Dear

This is advise you that \_\_\_\_\_ (carrier's) \_\_\_\_\_ proposal to locate a Telecommunications facility on the above referenced sites has been conceptually approved.

You may proceed with preliminary design plans at this time. Please submit \_\_\_\_\_ (#) \_\_\_\_\_ sets of preliminary plans along with a processing fee of \$1,000.00 for each site. This fee is to cover the cost of both preliminary and final plan review. Please make each check payable to Department of Transportation.

Thank you for your continued cooperation and should you have any questions, please call me at \_\_\_\_\_ (telephone number) \_\_\_\_\_ .

Sincerely,

Airspace Manager

Attachment: DARC Comments  
Proposal Checklist  
Plans Checklists

Note: This format can also be used to advise the Carrier of preliminary or final approval.

Note: This format can also be used to advise the Carrier that preliminary or final plans have been received, stating whether they are complete or requesting additional information. The letter should also provide a date when the DARC will grant approval, and if a Carrier representative should plan on attending the DARC.

## **SAMPLE MEMORANDUM TO A LOCAL PLANNING AGENCY**

District Letterhead

Date

Local Planning Agency Address

State of California, Department of Transportation, (Caltrans) as owner of the property located at \_\_\_\_\_ in \_\_\_\_\_, California, hereby authorizes

\_\_\_\_\_  
(carrier) to make application for any all land use zoning permits necessary for the approval and installation for any and all land use and zoning permits necessary the approval an installation of cellular telecommunications facilities on this referenced property. Caltrans' approval of the (carrier's) proposal to install this facility is subject to preliminary/final review of the plans and specifications and the carrier's execution of the site license agreement.

Sincerely,

District Airspace Manager

Note: To be sent only when DARC has completed a conceptual review of a proposal & if carrier has signed the MLA.



SAMPLE MEMO for an ENCROACHMENT PERMIT by EXCEPTION

TO: Encroachment Chief, DLPP

DATE:

FILE:  
PERMIT #:

FROM: (name/title)  
Office of Permits-District \_\_\_\_

SUBJECT: Longitudinal Encroachment - Microcell and Access Road

Your formal approval is requested for a longitudinal encroachment along the \_\_\_\_\_  
(site location: route, interchange, address, etc.)  
is to allow a \_\_\_\_\_ cell site and an access (describe path)  
(carrier)  
\_\_\_\_\_ to the cell site.  
(street/highway, address, other )

These proposed improvements will be allowed as an Airspace lease to be prepared and administered by Right of Way.

(Sample) Proposal Benefits and Impacts:

1. Two utilities to facilitate the microcell site will be placed within Caltrans right of way. The site will require a 110V power line and a telephone line to be placed underground between the right of way line and the access road.
2. The adjacent property owner would not allow maintenance access across their property to access the site.
3. Placing a site within this property is not feasible as contaminated material is known to be on the property.
4. If the encroachment is allowed, the district will require surfacing on the access road. The type of surfacing has not been determined; but it most likely will be AC pavement.
5. The proposal will provide short- and long-term benefits to Caltrans by providing revenue from the lease agreement.
6. An all-weather access road will be constructed which will be used by maintenance forces.

7. Access to the access-controlled right of way will be from a locked gate constructed in the right of way fence at\_\_\_\_\_.  
(street/highway, etc.)

This access is from a low-volume local street and does not impact the freeway. The freeway is in an approximate 20' fill section with large pine trees screening the area beyond the toe of slope.

8. The access road will be constructed at existing grade and will not have any impact on existing drainage.

9. The cell-site fenced area is proposed to be\_\_\_\_\_. Access by  
(dimension)

Maintenance forces around the cell site will not be restricted as there is/are approximately\_\_\_\_\_ between the toe of slope and right of way.  
(feet/inches)

10. Other than the trees there is no landscaping. The existing soil is rocky and shaded by the trees.

There are no other access alternatives to a cell site at this location. Direct access to the cell from a gate in the fence is not available, as private property exists between \_\_\_\_\_ and freeway right of way.  
(street/highway/other)

The proposal will not cause any operational, safety or maintenance problems.

Based on the above, I recommend approval of this longitudinal encroachment as shown on the attached location drawings.

(name), Chief  
Office of Permits

#### Attachments

- Location map
- Aerial photo (site highlighted )
- Site plan

I Concur:

\_\_\_\_\_  
(name)  
Program Manager  
Maintenance

\_\_\_\_\_  
(name)  
Program Manager  
Project Dev.

\_\_\_\_\_  
(name)  
Program Manager  
Right of Way

\_\_\_\_\_  
(name)  
Program Manager  
Operations

## DISTRICT CHECKLIST for Telecommunications Proposals

STEP 1: Receive request from Carrier to build a site on Caltrans property.

☐

**Narrative or form describing:**

1. Size pole, # of antennas, perimeter dimension (fenced area)
2. Type of facility (PCS, cellular, other)
3. Expected time schedule (building permits by ?, construction by ?)
4. Other colocatees?
5. Sketch or drawing of the area (site) needed on Caltrans facility (premise)
6. Optional: Depiction of the equipment (photo rendition, sketch, etc.)

STEP 2: Meet with the core DARC team to review the proposal

CORE: Traffic Ops, Environmental, Telecom Engr.

ADD (as appropriate): Landscape Architect, and the operator of the facility (e.g. park and ride, maintenance superintendent, or facilities manager)

IF IT IS WITHIN THE OPERATING RIGHT OF WAY

Add: project development

IF IT IS ON A STRUCTURE WITHIN OPERATING RIGHT OF WAY

Add: structures

IF IT IS UNDERNEATH A STRUCTURE

Add: hydraulics and fire marshal

IF IT IS ON A BRIDGE

Determine if it will be impacted by seismic retrofit

STEP 3: Advise Carrier of Conceptual Review response

☐

**Send letter back to carrier, stating either A or B:**

A. Conceptually your proposal is OK and please submit your preliminary proposal within 30 days or the site will be available for other carriers to submit proposals.

Note:

1. Response to the carrier is due within 15 working days of receipt of their conceptual proposal.

2. Inform the carrier that a full DARC review will be held once the preliminary package is submitted and include the preliminary package checklist.
3. If this is a new carrier (no MLA, no conceptualls, etc.), send them the "Guidelines to Licenses Sites" so they can become familiar with the program.
4. Ensure the carrier understands Caltrans' right to occupy the tower with a whip antenna (per the MLA) and carrier must provide conduit from a pad to the tower.

B. If the answer is NO, tell them why (e.g. completing 2 year seismic retrofit project - "come back then," widening off ramp, or consolidating maintenance station). Additionally, you may want to:

1. Offer to help them find a more suitable location
2. Provide them with inventories, databases, maps, and the Internet address

STEP 4: Preliminary Proposal submitted by carrier.

☐

Review it to ensure it meets the requirements of the checklist

- ◆ Ensure it is basically the same as the conceptual proposal.

☐

Hold the Preliminary DARC

- ◆ Make sure the right programs are represented (not too many or too few)

☐

Set a time frame to review the proposal. You can:

- ◆ Send them copies of plans with a form to use to respond with comments.
- ◆ Set a formal meeting time for complex issues or proposals.
- ◆ Keep the blueprints in a common room for 1 week for review at their discretion.
- ◆ Tell them that if no comments received back by a certain reasonable time, then "approved" is assumed. (This does NOT apply to the Telecom Engr. A non-response needs to be elevated to HQ/AS.)

☐

If HQ must be involved in the preliminary review, allow additional time:

- ◆ The Permit by Exception Committee, Structures Review or Seismic Retrofit coordination will require at least 15 working days to review/approve and get back to districts.
- ◆ FHWA (and sometimes Telecom Engr) review/approval is obtained after the preliminary DARC is completed.

☐

Advise carrier of review/approval of their preliminary proposal.

- ◆ Advise them final plans must address any issues raised during the DARC.
- ◆ The carrier may want to address any major concerns directly with the DARC.
- ◆ If possible, send them the SLA to execute (see Step 5)

☐

Deposit the \$1,000 processing fee

- ◆ If the proposal is for more than one carrier, but the plans show all the facilities (thus only one review was needed), only one fee is required.
- ◆ Open an account in RWPS for each carrier, depositing the processing fee in the primary carrier's account.

#### STEP 5: Execute the Site License Agreement

☐

Establish the base license fee per the matrix.

- ◆ HQ R/W must pre-approve any rates outside the matrix.

☐

Determine the "special clauses" for the SLA that cover:

1. Licensor's use of the facility (reserved space, additional antennas at cost, mounting of surveillance cameras, elimination of interference)
2. Access to and from the facility including notification, maintenance, gates.
3. Maintenance responsibilities of the carrier
4. Identify if the carrier will be responsible for obtaining a maintenance permit as the facilities and access are within the operating right of way. (Note this special clause does not apply to the need for an encroachment permit or a building permit as this is covered in the MLA.)

5. Other users at the site (colocation), stating that agreement has been reached between the parties and that a separate SLA will be needed for the other carrier and which carrier will be paying the base license fees.
6. The known and unknown hazardous substances at the site.
7. Identify any “upgrades” or “modifications” to the site that the carrier will be required to do prior to constructing, i.e. protecting the slope, building a gate, protecting some trees.
8. Any other special clauses, provisions, or agreements needed to protect the Department’s interests.

☐

HQ R/W will need to pre-approve any “new” special clauses (see list).

☐

Request FHWA’s preliminary approval of the proposal. Submit

1. Plans, photos, sketches
2. DARC notes
3. Carrier's narrative description of proposal

☐

District executes SLA, granting a six month period (Local Permitting Period)

#### STEP 6: Local Permitting Period

☐

Work with the carrier to obtain final reviews and approvals

☐

Submit environmental document prepared by carrier for review by the Environmental Branch.

☐

Submit final plans, final DARC notes and carrier’s response to FHWA (via HQ) for final approval.

- ◆ Include original Categorical Exclusion/Categorical Exemption executed by District Environmental Branch.

☐

Submit final plans, final DARC notes, and carrier’s response to HQ Telecommunications Engineer for final approval. Required.

- ◆ May have been provided to the district directly during the preliminary and/or final DARC meeting.

☐

Pend for final approvals, including the local building permit.

STEP 7: Approval to construct

☐

Obtain final approvals as evidenced by:

1. Local building permit
2. Environmental approval
3. Final DARC
4. Final approval of plans

☐

Annual Base License Fee payment

- ◆ Enter into RWPS as a Telecommunications License account



# APPENDICES

DEPARTMENT OF TRANSPORTATION  
OFFICE OF THE DIRECTOR  
1120 N STREET  
P.O. BOX 942873  
SACRAMENTO, CA 94273-0001  
(Mail Station 49)



PHONE (916) 654-5267  
FAX (916) 654-6608

September 13, 1996

Dear Sir or Madam:

The California Department of Transportation (Department) recognizes the potential benefits and opportunities in partnering with the telecommunications providers to improve its service to the traveling public and provide potential sites for telecommunications providers.

The Department is developing a process that will allow the leasing of its properties for telecommunications (wireless) services. Specific properties available for lease will be those outside the right of way, airspace parcels (sites suitable for a secondary use), excess land remnants, maintenance stations/equipment yards, Park and Ride lots, and State Roadside Rest Areas. The Department will also consider proposals to use all other properties not identified in any of the above inventories if it is determined that the operation of and access to the proposed telecommunications facility will not interfere with our operations or impact the safety of the traveling public.

The Airspace Development Leasing office, under the Right of Way and Asset Management Program, is responsible for implementing this new activity. All telecommunications industry representatives are encouraged to contact the local District Airspace Managers for information about specific sites that may be suitable for a (wireless) facility. A contact list is attached for your use,

The Department will use a Master Lease or License Agreement that outlines the general terms and conditions, a basic rate schedule, and an addendum for each selected site specifying the rate, term and use. Facility owners will be required to provide co-locations for other providers when feasible.

Siting guidelines for roadways are included for your information. The siting guidelines for non-roadway sites tend to be less restrictive.

Inventories and maps are available in all districts, so please review the sites to determine if any would satisfy your needs in establishing or expanding your telecommunications network. In order to estimate and prioritize the workload, including the review of specific sites for compatibility and conditions of use, please submit a letter (format attached) stating your interest in a particular site(s) with a basic explanation of the type of facility (e.g., vault, antenna, tower) that would be installed. As this preliminary information from you will help us implement the proposed leasing process more efficiently and effectively, we request you submit these letters by October 25, 1996. Depending upon the volume of responses, you will be informed in November or December if your proposed use is compatible with the Department's primary use, which is to provide a safe and efficient transportation system, thus warranting more in-depth reviews and approvals.

It is anticipated that remote sites with only one interested party will be offered for lease as early as possible. The leasing process for other sites, including the master agreement, will be implemented later this year.

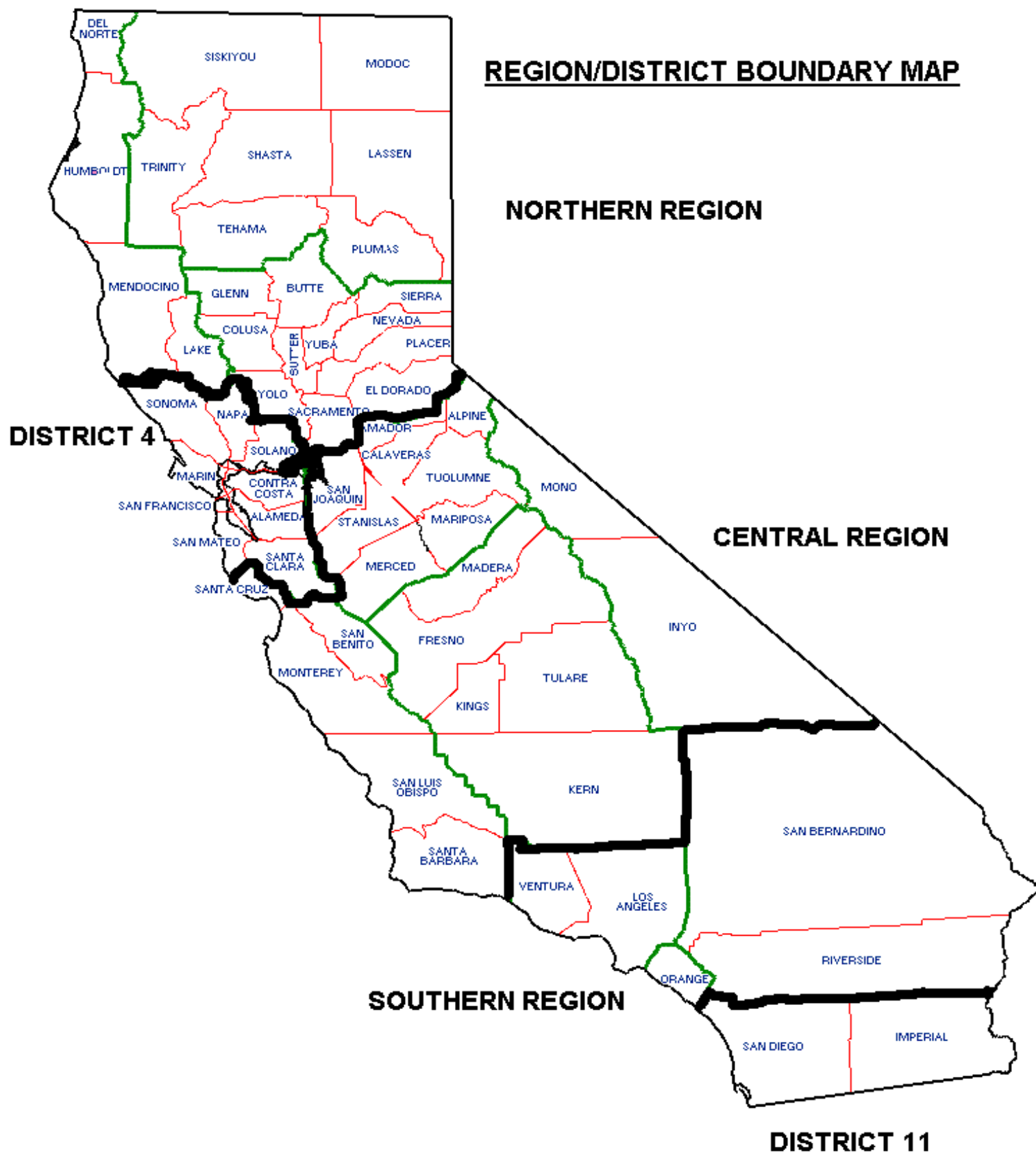
If you have specific questions about the proposed process, please call Susan Ellis, Right of Way and Asset Management Program, at (916) 654-4812.

My staff and I look forward to working with you in developing this mutually beneficial program. Your continued participation and cooperation in this new area of state/private partnering is greatly appreciated.

Sincerely,

ANDREW POAT  
Chief Deputy Director

Attachments



## DISTRICT AIRSPACE MANAGERS

District 1, 2, 3  
Bonie Oliver  
Right of Way  
P.O. Box 911  
Marysville, CA 95901  
(916) 741-4427

District 4  
Larry Appiano  
Right of Way  
P.O. Box 23660

District 5, 6, 9  
Hermann Hamm  
Right of Way  
P.O. Box 12616  
Fresno, CA 93778-2616

District 7  
Wil Brilz  
Right of Way  
120 South Spring Street  
Los Angeles, CA 90012-3606  
(213) 897-4820

District 8  
Terry Moore  
Right of Way  
P.O. Box 231  
San Bernardino, CA 92402  
(909) 383-6213

District 10  
Gerry Wisenor  
Right of Way  
P.O. Box 2048  
Stockton, CA 95201  
(209) 948-7860

District 11  
Carolyn Lee  
Right of Way  
P.O. Box 85406  
San Diego, Ca 92186-5406

District 12  
Bob Pencall  
Right of Way  
Building C  
Santa Ana, CA 92705  
(714) 724-2554

Headquarters - Sacramento  
Susan Ellis  
Right of Way and Asset Management  
Mail Station 37  
P.O. Box 942874  
Sacramento CA 94273-0001  
(916) 654-4812

Licensee: \_\_\_\_\_

DEPARTMENT OF TRANSPORTATION  
TELECOMMUNICATIONS MASTER LICENSE AGREEMENT  
CELLULAR AND PCS CARRIERS

This Master License Agreement is made and entered into by and between the State of California, acting by and through its Department of Transportation, hereinafter called Licensor, and the above-named Master Licensee, hereinafter called Licensee.

WITNESSETH:

WHEREAS Licensee is a wireless communications company licensed by the Federal Communications Commission ("the FCC") to operate in all or some counties in the State of California as a Cellular and/or Personal Communication Service (PCS) provider; and

WHEREAS Licensee seeks to construct, install, operate and maintain radio transmitting and receiving antennas together with other associated electronic equipment in connection with its wireless communications business as needed to expand and to improve its wireless telecommunications service; and

WHEREAS Licensor has properties well suited for the antennas needed for wireless communications systems because they are extensive and located throughout the State, and because often they are adjacent to populated areas but not located in the heart of residential areas; and

WHEREAS Licensor desires to improve services available to the traveling public, to enhance communications systems within the State, and to add to its revenues by making state properties available for wireless communications infrastructure consistent with other public uses of its property; and

WHEREAS Licensee proposes that the use of State properties can be an important option for the placement of antenna sites if the cost is competitive and the process of establishing sites is expedited; and

WHEREAS Licensor has determined to make certain of its properties available to wireless communications companies, on a fair and equitable basis, for use as antenna sites; and

WHEREAS Licensor may seek to provide the traveling public with wireless telephone access to traffic information lines. If Licensor does so, Licensee shall cooperate in developing a program to provide the traveling public with wireless telephone access to information lines, and to create an emergency access line subject to Licensee's operational capacity;

NOW THEREFORE, in consideration of the mutual covenants and benefits stated herein, and in further consideration of the obligations, terms and considerations hereinafter set forth and recited; Licensors and Licensees agree as follows:

## **MASTER LICENSE AGREEMENT**

### **1. Master License Agreement.**

This Master License Agreement (hereinafter, "Agreement") sets forth the basic terms and conditions upon which each Site (defined in Section 2 below) is licensed by Licensors to Licensees. Upon agreement between the parties with respect to the particular terms of a Site, the parties shall execute a completed "Site License" in the form attached hereto as Exhibit A and incorporated herein by this reference (the Site License Form may be modified in the future without amending the Agreement). In the event of a discrepancy or inconsistency between the terms and conditions of a particular Site License and this Agreement, the terms and conditions of the particular Site License shall govern and control.

### **2. Site License.**

(a) Licensors own highway and freeway right of way, including appurtenant airspace rights, fixtures and signs, buildings, yards, park and ride lots, excess land, and other real property acquired for, or to support, the State's transportation system. Each general location licensed ("Premises") is further described in the particular Site License and the particular portion of the Premises used by Licensee is referred to herein as a "Site" (or collectively described herein as "Sites"). Subject to the terms and conditions contained in this Agreement, and in the Site License relating to a particular Site, Licensors hereby license to Licensee and Licensee licenses from Licensors the Site on the Premises owned or controlled by Licensors, as described in the particular Site License. The Site License includes access to and from the Site, and to and from the closest public right-of-way and on and over the land of which the Premises and the Site are a part (subject to terms and conditions of each Site License, with special limitations for access from access-controlled highways and freeways) and access to appropriate utilities as set forth in Section 7. Each Site License shall act as a separate and independent agreement for each Site, the express intent of the parties being to use this Agreement to facilitate each of the independent transactions. It is understood and agreed that Licensee's right and license to place unmanned radio communications facilities on the Premises is non-exclusive, but that the Site shall be exclusive for Licensee's equipment, subject to the terms and conditions of this Agreement, including but not limited to co-location requirements contained herein. Further, Licensee's license and rights granted under this Agreement and the particular Site License are irrevocable until the expiration or sooner termination of this Agreement and/or the Site License, by their respective terms. The "Commencement Date" for each Site License shall be either the date Licensee receives all permits and approvals necessary to construct and operate its facility at the Site (at which time Licensors will issue an Encroachment Permit allowing construction/installation at the Site), or six (6) months from the date the Site License is executed ("Execution Date"), whichever occurs first. The period between the Execution Date and the Commencement Date shall be

referred to herein as the "Local Permitting Period."

(b) Licensee may cancel a Site License at any time prior to the Commencement Date. The Local Permitting Period may be extended for two (2) additional three (3) month periods upon payment of twenty-five percent (25%) of the annual fee under the Site License for each three (3) month extension, and a showing of good faith efforts to obtain permits and/or commence construction. Under special circumstances where the delay in obtaining permits and/or commencing construction is beyond the reasonable control of Licensee, Licensor may grant up to two (2) additional extensions to the Local Permitting Period, upon the same payment terms as above.

### 3. Use.

(a) A Site may be used by Licensee only for the construction, installation, operation, replacement, removal, maintenance and repair (collectively "Operations") of an unmanned telecommunications facility, including required antennas and antenna support structures (as the same may be modified, added to and/or substituted from time to time), in accordance with the terms herein. Each such antenna and/or antenna support structure shall be configured as required by Licensee from time to time provided that Licensee obtains all permits and approvals required by applicable jurisdictions relative to any such desired configuration. Licensee shall have the right to park its vehicles on the Premises when Licensee is servicing its communications facility, subject to any conditions in the Site License. All operations by Licensee on the Premises or Site shall be lawful and in compliance with all applicable Federal Communications Commission ("FCC") requirements. Licensee shall, at its sole expense, comply with (and obtain and maintain such licenses, permits or other governmental approvals necessary to comply with) all laws, orders, ordinances, and regulations of federal, state, county, and municipal authorities applicable to its Operations or use of the Premises or Site. Licensee shall comply with any directive of any public officer or officers applicable to its Operations or its use of the Premises or Site (collectively "Laws"), which shall, with respect to Licensee's Operations, impose any violation, order or duty upon Licensor or Licensee arising solely from Licensee's use of the Premises subject, however, to Licensee's right to contest, in good faith, any such violation, order or duty. Licensee's Operations shall not interfere with the operations of Licensor, the traveling public, or any other users existing on the Commencement Date on the Premises. Licensor agrees to reasonably cooperate with Licensee, at Licensee's expense, in executing such documents or applications necessary or appropriate in order for Licensee to obtain and maintain, at Licensee's expense, such licenses, permits and other governmental approvals needed for Licensee's Operations. Licensor authorizes Licensee to make and prosecute applications for all such approvals. If Licensee is unable to obtain and maintain such licenses, permits or approvals (notwithstanding reasonable efforts to do so), Licensee shall so notify Licensor and the particular Site License shall immediately terminate.

(b) Licensee agrees to install, maintain, and operate its telecommunications equipment in accordance with the specific site standards more particularly described in each Site License and any other applicable statutes pertaining to the use of telecommunications and/or electronic equipment. In the event Licensee's installation, or Operation, in any way



hinders, obstructs, or interferes with, the radio or electronic equipment of Licensor, or any tenant operating at the Premises as of the Execution Date of the applicable Site License, Licensee shall, at its sole cost and expense, upon receipt of written notification, forthwith cease the interfering operation, except for brief tests necessary for the elimination of the interference. Licensee shall conduct its Operations in compliance with all laws, orders, ordinances, and regulations of all federal, state, county, and municipal authorities. Licensor may execute any Site License upon the condition that Licensee's equipment shall be installed in such a manner to facilitate Licensor's telecommunication needs as set forth in Section 21 of this Agreement.

(c) If such hindrance, interference or obstruction cited in Subsection 3(b), is not eliminated or does not fully cease within thirty (30) days after written notice to Licensee by Licensor or any appropriate regulatory agency, Licensor shall have the right to order cessation of Licensee's Operations at the Site as may be necessary to continuously eliminate said interference by giving ten (10) days prior written notice. In the event of Licensee's inability or refusal to eliminate such interference, Licensor may at its option additionally terminate the affected Site License and evict Licensee. Once Licensee has more than ten (10) Site Licenses in effect, if such uneliminated interferences occur at over twenty percent (20%) of Licensee's Sites occupied under this Agreement, Licensor may terminate this Agreement and evict Licensee from all its Sites on thirty (30) days' written notice.

(d) Any interference and compatibility testing required hereunder for radio interference with other equipment located at the Premises as of the Commencement Date, or Licensor's equipment installed at any time shall at the sole and reasonable cost of Licensee, be made by a qualified technical person representing Licensee and a representative designated by Licensor. If the test is satisfactory to both the technical person and Licensor representative, a certification of such test signed by both the technical person and the Licensor representative shall be forwarded to Licensor at locations indicated in Section 16. Any reasonable costs incurred by Licensor to conduct compatibility testing shall be reimbursed to Licensor within thirty (30) days after receipt of billing and reasonable supporting documentation.

(e) Any interference with Licensor's electronic equipment during an emergency incident will require immediate cessation of operation, transmission or further use of Licensee's equipment provided Licensee is given notice of such incident and is afforded the opportunity to cure such interference. Failure to do so promptly after notification of such interference will be grounds for immediate termination of the particular Site License and eviction of Licensee.

#### 4. Term: Termination

(a) The term of this Agreement shall expire on June 30, 2002. The parties agree in good faith to commence negotiations for a successor agreement or to extend the term of this agreement on, or before, January 2, 2002, if the parties have a mutual interest in such a successor agreement.

(b) No new individual Site Licenses shall be entered into pursuant to this Agreement after July 1, 2002. The initial term of each Site License shall be ten (10) years commencing on the Commencement Date. Licensee agrees to begin the process of gaining the approvals necessary to the initiation of site construction immediately after the Execution Date. If, however, Licensee does not, in good faith, actively pursue a building permit within the "Local Permitting Period" (as may be extended pursuant to Subsection 2(b)), Licensor may terminate the individual Site License.

(c) Licensee shall have the option to renew each Site License for three (3) consecutive five (5) year periods on the same terms and conditions in effect during the initial term subject to Licensor's review and approval, with the exception of the amount of the License Fee (defined in Section 5, below) for use of the Site. However, the individual Site License for each Site shall be automatically terminated unless, at least sixty (60) days before the expiration of each five (5) year term, Licensee notifies Licensor of its intention to renew. This Agreement, as incorporated into each Site License shall remain in full force and effect during the term of that individual Site License. At the end of the initial term and each renewal term, the Site shall be reevaluated to determine if the License Fee should be readjusted due to a change in geographic area type as set forth in Subsection 5(b). The License Fee shall be automatically increased if Licensee's equipment is modified to a higher category under the provisions of Subsection 5(b), and such modifications shall require the written approval of Licensor.

(d) If, at any time during the term of an individual Site License, it becomes commercially inadvisable in Licensee's business judgment for Licensee to utilize that particular Site, or if any required certificate, permit, license or approval is denied, canceled or otherwise terminated so that Licensee is unable to use the Site for its intended purpose, Licensee may terminate the individual Site License. If Licensee terminates a Site License pursuant to this Subsection 4(d), Licensee will provide Licensor with a minimum of one hundred twenty (120) days' written notice of its intention to terminate the individual Site License and will, in the case of a business judgment termination only, compensate Licensor in an amount equivalent to the annual License Fee as liquidated damages for the early termination. In the event that less than one (1) year remains in the term of the individual Site License terminated by Licensee, Licensee shall pay to Licensor such liquidated damages an amount equal only to those installments due or to become due during the remainder of the term of the individual Site License .

(e) If Licensor's use of a Site makes it necessary for Licensee to remove or relocate its equipment and facilities to another location on the Premises or to another Licensor location near the Site, or if there is interference to or involving Licensee's Operations which cannot be resolved as set forth in Section 6, Licensee may elect to terminate the Site License for that Site, without penalty.

(f) Licensor may terminate an individual Site License if its own need for or use of a Site requires relocation of Licensee's facilities because of state transportation purposes, economic necessity or the best interests of the traveling public. To the extent practicable, Licensor shall provide Licensee with three hundred sixty-five (365) days' prior written notice

of the termination of an individual Site License due to Licensor's required need for or use of the Site. If Licensor's own need for or use of a Site requires it to terminate an individual Site License within the first five (5) years of the Site License, Licensor shall credit Licensee, against fees payable or to be payable under other individual Site Licenses, for the construction costs and expenses actually incurred by Licensee in installing facilities on the Site, in an amount not to exceed \$60,000 for a macrocell site, \$40,000 for a minicell site or \$30,000 for a microcell site (as those terms are defined in Section 5 (a) (ii)), amortized over sixty (60) months straight line depreciation. (For example, if Licensee's construction costs and expenses were \$40,000, and Licensor terminated the Site License twenty four (24) months after the Commencement Date, Licensee would be entitled to a credit of \$24,000). Licensor shall use its best efforts to find another suitable location for Licensee's facilities in the event that Licensor's need for or use of a Site requires relocation by Licensee. Licensee's obligation to pay a fee for the use of an individual Site shall cease, and a prorated portion of any advanced payment made by Licensee shall be returned to Licensee by Licensor upon the date that Licensee removes its equipment and restores the Site, as set forth in Subsection (g) below.

(g) Upon termination or other expiration of an individual Site License, Licensor shall have the option of (1) keeping the tower(s) or monopole(s) and ancillary improvements, such as buildings, vaults, equipment sheds and pads, in place (except for Licensee's equipment and antennas), or (2) requiring Licensee, on thirty (30) days' notice given before, or within sixty (60) days after, the expiration of the site license, to remove the tower(s), hardware, building(s) and ancillary improvements (above and below ground) made by Licensee, and to return the Site to the condition existing on the Commencement Date, normal wear and tear and damage not caused by Licensee excepted, to the satisfaction of Licensor, at Licensee's sole cost and expense. If Licensor exercises its option to keep the tower and ancillary improvements in place on an individual Site, the following conditions shall apply: (1) Licensor shall accept the tower and ancillary improvements in their then existing condition, "AS-IS," without any representation or warranty, and Licensee shall have no further obligation with respect to the Site or such equipment, and (2) if the Site License is terminated pursuant to Subsections 4(e) or (f) above, then Licensee shall be entitled to a credit against other existing or future License Fees in an amount equal to the value of the tower and ancillary improvements retained by Licensor, based on their initial cost, not to exceed \$60,000, amortized over a ten (10) year period (straight-line amortization, e. g., 1/120th per month). To the extent reasonably practicable, Licensor will advise Licensee in writing prior to entering into a Site License of Licensor's desire to retain Licensee's Tower or ancillary improvements pursuant to this Subsection. The cost of the tower and ancillary improvements and Licensor's reimbursement obligation for the cost thereof may be modified in the individual Site Licenses.

If Licensor advises Licensee to remove its facilities, and Licensee refuses to do so, Licensor may remove the facilities and charge the cost and expense of removal to Licensee or deduct the costs and expenses from monies due Licensee under this Agreement, individual Site Licenses or any other agreements. If no such monies are owed, Licensor may invoke any remedies provided herein or at law or equity to recover all monies owed. Except as otherwise provided herein, the fee for use of a Site terminated before the end of the term for that Site

License shall not terminate until the later of (1) the effective date of the early termination or (2) the date on which Licensee has removed its equipment and restored the Site in accordance with Section 12(a) or (3) the date on which Licensor notifies Licensee of its election to exercise its option to accept transfer of Licensee's facilities.

(h) All notices of termination shall become effective on the tenth day following the date the notice is received pursuant to Section 16 or such later date specified in the termination notice.

## 5. License Fee.

(a) Base License Fee Factors - Licensee shall pay Licensor an annual fee ("License Fee") for the use of each Site that is the subject of an individual Site License, which fee shall be calculated in accordance with this Section 5. The License Fee for the initial ten (10) year term of the individual Site License for each Site shall be calculated on the basis of the following two factors: (1) its geographic location and (2) the equipment and building space utilized.

(i) The State shall be divided into three types of geographic areas for the determination of the first factor. The three geographic area types are as follows:

Category 1: "Prime Urban" - Are the "Urbanized" (as defined below) portions of the Counties of Marin, San Francisco, San Mateo, Santa Clara, Alameda, Contra Costa, Los Angeles, Orange and San Diego.

Category 2: "Urbanized" - includes all areas defined as "Urbanized" in 23 U.S.C. 101 ["... an area with population of 50,000 or more designated by the Bureau of the Census, within boundaries to be fixed by responsible State and local officials in cooperation with each other, subject to the approval by the Secretary..."]. For reference purposes, currently designated urbanized areas are shown in yellow on the official State of California highway map attached as Exhibit B to this Agreement.

Category 3: Rural - any area within the State of California not Urbanized, as defined above.

(ii) The equipment and building space utilized shall be determined by the following definitions of macrocell, minicell and microcell facilities and shall be used to determine the second factor necessary to the calculation of the License Fee:

Macrocell: Facility with nine (9) or more antennas and/or with equipment building or concrete pad space and space required for the foundation of the monopole or tower when combined exceeds 500 square feet, not to exceed sixteen (16) antennas or two thousand five hundred (2,500) square feet. A standard telecommunications facility with a vault or enclosed building is an example of a macrocell site.

Minicell: A facility with four (4) to eight (8) antennas and/or with equipment building or concrete pad space and space required for the foundation of the monopole or tower, when combined is in excess of 300 square feet but less than 500 square feet. A standard telecommunications facility with free-standing cabinets on a pad is an example of a minicell site.

Microcell: Facility with one (1) to three (3) antennas and/or with equipment building or concrete equipment pad space and space required for the foundation of the monopole or tower, when combined is less than 300 square feet.

(b) Base License Fee Calculation: Based on the geographic location and equipment and building space factors detailed above, the annual License Fee to be paid for the use of each of the sites that is the subject of an individual Site License shall be calculated as follows:

	<u>Macrocell</u>	<u>Minicell</u>	<u>Microcell</u>
Category 1	\$21,000	\$18,000	\$15,000
Category 2	\$16,200	\$15,000	\$12,000
Category 3	\$12,000	\$12,000	\$ 9,900

(c) The License Fee for any facility which includes equipment or building space dimensions different from those set forth in the definitions in Subsection (a)(ii) above, shall be negotiated by the parties in good faith. The amount of space licensed shall include the total area fenced by Licensee. The building space dimensions shall not include space required by Licensor or any third party for co-location or co-use of the Site who is separately paying a fee to Licensor for the space it is utilizing. If Licensor requires, or if there are other circumstances caused by geographic, security or other concerns, which requires that Licensee utilize space on the Premises in excess of its customary needs or the size limitations specified herein, the individual Site License may provide for an alteration of the Site designation as a Macrocell, Minicell or Microcell.

(d) License Fee Payment Schedule - The first annual payment for each Site shall be paid to Licensor within ten (10) days after the Commencement Date and shall be a prorated payment for the period from the Commencement Date through the next occurring July 1. Thereafter, Licensee shall make an annual payment on July 1. Payments shall be mailed to: Accounting, Department of Transportation, P.O. Box 168019, Sacramento, CA 95816-3819.

(e) Fee Adjustments - Beginning on July 1, 1998 and on each July 1 thereafter during the term of each Site License: (i) Licensor will automatically increase and Licensee shall automatically pay the License Fee, payable under the Site License, and (ii) the License Fee set forth in Subsection 5(b) shall be increased. The amount of such annual increase shall be determined by multiplying the annual License Fee for the last year prior to the increase by three and one-half percent (3.5%). A chart showing the annual fee for each year after July 1,

1998, is attached hereto as Exhibit C.

(f) In the event Licensee fails to pay the annual License Fee within ten (10) days of when due, the past-due License Fees shall bear interest from (but excluding) the date due until paid at the lesser of (i) twelve percent (12%) per annum, or (ii) the maximum rate permitted under California or federal law, if the aforesaid rate exceeds such maximum.

(g) If Licensee occupies a site after June 30, 2012, the parties shall renegotiate the base License Fee to reflect fair market value. However, in no case shall the License Fee be less than it would be under the annual rent provision of Paragraph 5(b) as adjusted by 5(e). If the parties cannot agree on a new rent, the matter shall be submitted to a mutually agreeable Appraiser who is a Member of the Appraisal Institute ("MAI") for a binding determination.

## 6. Improvements and Construction

(a) Prior to commencing any installation, construction, alteration or improvement at any Site, Licensee shall obtain Licensor's prior written approval of Licensee's plans for the installation or alteration work which plans shall be attached to the Site License upon execution. A response (approval, denial, request for modification or additional information), including Federal Highway Administration (FHWA) and environmental clearances, will be made within forty-five (45) days of submittal of such plans; if a response is not forwarded within forty-five (45) days, Licensee shall be entitled to an extension of the Local Permitting Period. Licensee's plans shall include information on the length, width, weight, and cable routing, of and between equipment cabinets and/or shelters, antennas and equipment technical specifications, so as to permit Licensor to reasonably verify their placement on the Premises, potential interference and proper structural loading and Licensee shall provide Licensor with any other information as Licensor may reasonably request with respect to such plans. Notwithstanding the foregoing or anything to the contrary set forth in this Agreement or any Site License, Licensee may replace, exchange, substitute or modify ("replacement") its equipment or antennas installed at any Site with equipment or antennas substantially similar to the equipment and antennas previously approved by Licensor, so long as such replacement equipment and antennas operate at the same frequencies, power levels, emissions, gain, bandwidth and beamwidth and (i) are no larger in size or heavier in weight, and (ii) do not enlarge the physical size of the Site area, subject to Licensor's having thirty (30) days' notice to insure there will be no interference with Licensor's operations.

(b) If construction is proposed, Licensee shall, prior to any construction or reconstruction, apply for an encroachment permit and submit a complete set of plans, specifications, and structural calculations, stamped by a California NIA registered Engineer, to Licensor, and construction is not to proceed prior to approval of said plans by Licensor. Licensor shall respond (approval, denial, request for modification or additional information) within forty-five (45) days of Licensor's receipt of Licensee's plans. If Licensor does not provide such approval or request for changes: (i) within such forty-five (45) day period, then Licensee shall be entitled to one month's free extension of the Local Permitting Period, and (ii) if after sixty (60) days Licensor has not delivered such approval or request for changes, Licensor and Licensee shall meet and confer to determine a mutually acceptable additional

extension to the Local Permitting Period. Licensor shall not be entitled to receive any additional consideration in exchange for giving its approval of Licensee's plans. If the appropriate local entity declines to inspect Licensee's construction, Licensee shall provide written confirmation by a qualified individual, such as a current or former building inspector or registered engineer, that the construction conforms to plans and all appropriate building standards, prior to issuance of a Department of Transportation Notice of Completion by Licensor.

(c) All of Licensee's installation and alteration work shall be performed in accordance with applicable building codes and shall not adversely affect the structural integrity or maintenance of Licensor's property or improvements. Any structural work or reinforcement on an improvement shall be approved by a licensed structural engineer at Licensee's sole cost and expense. During construction, Licensee shall perform work in such a manner as will not hamper Licensor's operations or the needs of the traveling public.

(d) Licensee shall keep the Premises and Site free from any liens arising from any work performed, materials furnished, or obligations incurred by or at the request of Licensee. If any lien is filed against the Premises or the Site as a result of the acts or omissions of Licensee, or Licensee's employees, agents, or contractors, Licensee shall discharge, bond or otherwise secure same to Licensor's reasonable satisfaction within thirty (30) days after Licensee has notice that the lien has been filed. If Licensee fails to commence steps to discharge, bond or secure any lien within such thirty (30) day period, then, in addition to any other right or remedy of Licensor, Licensor may, at its election, upon five (5) days' prior written notice to Licensee discharge the lien by either paying the amount claimed to be due or obtaining the discharge by deposit with a court or a title company or by bonding. Licensee shall pay on demand any amount so paid by Licensor for the discharge or satisfaction of any lien, and all reasonable attorneys' fees and other legal expenses of Licensor incurred in defending any such action or in obtaining the discharge of such lien, together with all necessary reasonable disbursements in connection therewith.

(e) Except as otherwise expressly set forth in this Agreement, Licensee agrees that each Site and every part and appurtenance thereof is offered AS IS. Based upon information supplied by Licensor on each Site License, Licensee will evaluate the possibility based on Licensee's contemplated Operations of interference from, or to, existing wireless communication or other uses on the Premises. Licensee will then determine if interference will occur assuming the other user's equipment and Licensee's equipment is properly and lawfully installed and operated. If Licensee determines that any such existing user would interfere with Licensee's Operations but that such interference can be reasonably eliminated, Licensee shall so notify Licensor and Licensor shall use reasonable efforts (with the cooperation of Licensee) to remedy the condition deemed to be responsible for such potential interference; provided, however, Licensor's failure to remedy such condition shall in no event result in any liability of Licensor hereunder or under any Site License. Any physical change to Licensor's existing equipment requested by Licensee shall be at Licensee's sole cost. At such time as Licensee determines that no interference shall occur, such determination by Licensee shall be binding on Licensee, and subject to Licensee's rights under Section 4, no subsequent determination with respect thereto shall excuse Licensee from liability hereunder

or with respect to any Site License; provided, however, that if Licensee's Operations are adversely affected in any material way as a result of the improper or unlawful operation of any equipment located on the Premises at the time of Licensee's evaluation or as a result of modifications to equipment and/or additional equipment being installed and operated on the Premises by either Licensor or any other user of the Premises under the control of Licensor, Licensor shall use its best efforts (with the cooperation of Licensee) to promptly resolve such interference. In no event shall Licensor's inability to resolve such interference entitle Licensee to terminate any Site License unless after thirty (30) days following the commencement of such efforts at resolution, such interference has not been resolved to the reasonable satisfaction of Licensee. Nothing in this Agreement shall be deemed to waive any rights Licensee may have pursuant to applicable FCC regulations to enjoin such interference or pursue any other remedies available to Licensee at law or in equity after expiration of the thirty (30) day period referred to in the preceding sentence.

(f) Notwithstanding anything in this Section 6 to the contrary, Licensee acknowledges that Licensor may not have control over equipment located on or adjoining the Premises which would interfere with Licensee's use of the Site and shall not be liable for such lack of control. In the event of such interference, Licensor and Licensee shall use all reasonable efforts within their control to obtain the cooperation of the equipment owner to resolve such interference; provided, however, that if the parties shall not succeed in obtaining the cooperation of the equipment owner to resolve such interference within thirty (30) days following such interference, Licensee may immediately terminate any Site License so affected (and/or this Agreement if no Site Licenses remain subject hereto), and neither party shall have any further liability with respect to such Site License. Any prepaid License Fee shall be credited or returned to Licensee on a pro rated basis.

(g) All portions of the telecommunications facilities or other property or improvements attached to or otherwise brought onto the Site by Licensee shall, at all times and for all purposes, be the personal property of Licensee and at Licensee's option, may be removed by Licensee at any time during the term, subject to the provisions of Section 4 (g), and shall be removed no later than within fifteen (15) days after expiration of the term or termination of the applicable Site License.

(h) Upon execution of a Site License, Licensor shall not thereafter grant to any third party any lease, license or other permission to use (in this Section collectively, a "Grant") the Premises, Site or area surrounding the Premises under Licensor's reasonable control, if the use permitted under such Grant would cause interference with Licensee's Operations. Any such Grant shall expressly prohibit the user thereunder from interfering with Licensee's Operations. Licensee shall reasonably cooperate with Licensor and/or any subsequent third party user to eliminate any interference and to allow co-location, if possible.

## 7. Utilities and Access.

(a) Licensee shall have the right at its sole cost and expense to obtain and connect to telephone and electrical service from any utility company that provides or is willing to provide such service to the Site, subject to Licensor's right to approve proposed utility routes



and the manner of installation. Licensee shall timely pay all of Licensee's utility costs. Licensee shall either obtain electric power directly from the local utility or from Licensor's power source and shall pay for installation of a submeter. Licensee shall pay all local utility company charges directly to the provider. Licensor is under no obligation to provide power or allow Licensee to use its power source, but shall cooperate with Licensee in its efforts to bring electrical power to the Site.

(b) The following provisions shall govern access to the Site and Premises by Licensee, unless otherwise modified on a particular Site License. Access for construction, routine maintenance and repair, conducting feasibility studies and other non-emergency visits shall be stated in each Site License Agreement and require a minimum of one (1) business day's prior written notice to Licensor at Licensor's address stated in the Site License (no Site License shall have more than one address of record in each Region or District of Licensor). Some Site Licenses may allow non-written notice for non-emergency visits and/or routine maintenance and repair visits. In the event of an unscheduled repair or other emergency, Licensee shall be entitled to access to the Premises twenty-four (24) hours per day, seven (7) days a week subject to any special conditions in the Site License. If Sites are allowed that could affect traffic flow, named maintenance and contractors may be restricted to non-peak flow hours. Licensee shall endeavor to provide written (but in any event shall attempt to provide oral) notice of an emergency repair prior to accessing the Site. Any such access by Licensee shall be subject to any other or superseding access requirements as may be specified in a Site License.

#### 8. Improvement Fees/Taxes.

Licensee shall pay all real estate taxes, possessory interest taxes and other taxes and fees caused by Licensee's use and/or equipment placed on the Site or other improvements constructed by Licensee on the Premises.

#### 9. Insurance and Indemnification

(a) Licensee shall carry during the term of this Agreement, at its own cost and expense, the following insurance:

(i) "All Risk" property insurance for Licensee's property located at the Site;

(ii) Commercial general liability insurance having a minimum limit of liability of \$5,000,000 for each injury or death arising out of one occurrence and \$5,000,000 for damage to property from any one occurrence and excess/umbrella coverage of \$5,000,000; and,

(iii) Worker's Compensation and Employer's liability insurance, in form and as required by law.

(b) Licensee shall name Licensor as an additional insured under its liability policy and require its insurance company to give at least thirty (30) days' written notice of the termination, cancellation or material change of the policy to Licensor. Such endorsement

shall be delivered to Licensors within thirty (30) days from the execution of this Agreement and before the expiration of any term thereof from an insurance company with a minimum policy holder and financial rating of "B+/VII," or better in the then current edition of Best's Insurance Guide.

(c) Except as otherwise herein provided, the provision by Licensee of insurance required hereby shall not be construed to limit or otherwise affect Licensee's liability to Licensors.

(d) Licensee shall indemnify, defend and hold Licensors harmless from and against any and all direct and proximate claims, actions, damages, liability and expense (including reasonable attorneys' fees, costs and disbursements) in connection with the loss of life, personal injury, and/or damage to property to the extent arising from or out of: (i) all claims relating to or caused by, the equipment Licensee installs on Licensors' property and/or Licensee's Operations, (ii) any occurrence in, upon or at the Premises or elsewhere on the Site or on the land of which the Site is a part to the extent caused by the negligence or willful misconduct of Licensee or its employees, agents, or contractors, (iii) any occurrence occasioned by the violation of any law, regulation or ordinance by Licensee or its agents, employees, or contractors, or (iv) by Licensee's default under a Site License or this Agreement. The provisions of this Subsection 9(d) shall survive the expiration or termination of this Agreement with respect to any damage, injury, or death occurring before such expiration or termination.

(e) Notwithstanding anything in this Agreement, each party hereby releases and waives any and all claims against the other party and the other party's employees, agents, officers, partners and directors, for consequential, incidental or special damages, or lost profits.

#### 10. Assignment.

This Agreement and the Site Licenses granted hereunder are personal to Licensee. Except as hereinafter provided, Licensee shall not, without Licensors' and the Federal Highway Administration's ("FHWA") prior written consent which consent may be withheld in Licensors' sole and absolute discretion, assign or otherwise transfer this Agreement, a Site License or its interest in any particular Premises or any part thereof. Notwithstanding the foregoing Licensee may assign or sublet this Agreement, a Site License or its interest in a particular Premises or any part thereof without Licensors' or FHWA's consent to any person or business entity which is a parent, subsidiary, partner, or affiliate of Licensee, or controls or is controlled by or under common control with Licensee or is merged or consolidated with Licensee or purchases a majority or controlling interest in the assets of Licensee. Licensors may assign this Agreement, a Site License or any particular Premises or any part thereof, provided said assignee will assume, recognize and become responsible to Licensee for, the performance of all of the terms and conditions to be performed by Licensors under this Agreement. Any request for an assignment requiring Licensors' consent will require the payment of Licensors' then current assignment request processing fee (\$1,000 in 1997).

## 11. Repairs.

(a) Licensee shall, at all times during the term of any particular Site License and at Licensee's sole cost and expense, keep its facilities and equipment located on or about the Premises and every part thereof in good condition and repair, reasonable wear and tear excepted, including making replacements when necessary. If Licensee fails to promptly make any repairs that are necessary to remedy a dangerous condition on the Site caused by Licensee, its agents, employees or contractors, or other condition caused by Licensee, its agents, employees or contractors which is materially adverse to the quiet enjoyment by Licensor or any other user of the Site, Licensor shall give Licensee written notice of its intention to make such repairs and the date on which such repairs shall commence. Except for emergencies, Licensee shall be given at least fifteen (15) days from the day the letter is sent to commence the repairs. If Licensee does not, prior to the date set forth in such notice, commence to make such repairs, Licensor may make such repairs and shall be reimbursed by Licensee for any and all reasonable costs incurred by Licensor in performing (or contracting to have performed) such repairs, including any overhead costs reasonably allocable to the performance thereof. Licensor shall provide Licensee reasonably detailed supporting documentation of such costs concurrently with any demand for reimbursement.

(b) Licensee shall, at all times, during the term of any particular Site License and at Licensee's sole cost and expense, keep Licensee's equipment at the Site and any access roads constructed by Licensee for its sole use at the Premises in good condition and repair, except for any access roads or improvements installed by Licensor or other third parties.

(c) Licensee, at its sole cost and expense, will restore all Licensor property which is destroyed or damaged by Licensee's activities on a Site subject to an individual Site License. Licensee agrees to commence performance of any remedial work within thirty (30) days of written notice by Licensor and to complete remedial work required in the reasonable opinion of Licensor to restore the site to its original condition, reasonable wear and tear excepted, within the number of days specified in the written notice. The number of days specified shall be reasonable. If remedial work is not undertaken and completed within the specified time, Licensor may, on ten (10) days' prior written notice to Licensee, undertake and complete the remedial work with its own forces and/or independent contractors, and Licensee shall pay all actual costs or charges incurred by Licensor by reason of such work. Licensor shall provide Licensee reasonably detailed supporting documentation for such costs and charges.

## 12. Surrender of Premises; Holding Over.

(a) Upon the expiration or other termination of a Site License, Licensee shall peacefully vacate the Premises in as good order and condition as the same were on the Commencement Date, reasonable wear and tear, and damage not caused by Licensee excepted. If Licensee fails to promptly remove all of its facilities and equipment from the Premises within thirty (30) days after expiration or earlier termination of the Term, Licensor may, after five (5) days' prior written notice to Licensee, remove the same (without any liability to Licensee for any damage to such equipment and/or facilities which may result from reasonable efforts at removal), and Licensee shall pay to Licensor on demand any and

all reasonable costs incurred by Licensor in removing and storing such improvements and equipment prior to retrieval of same by Licensee. Licensor has no obligation to store such equipment, and Licensee shall have no claim if Licensor destroys the equipment if it is not removed by Licensee as provided herein. Any improvements Licensor desires to remain, shall be governed by the provisions of Subsection 4(g).

(b) Should Licensee continue to hold the Premises after the termination of a Site License, whether the termination occurs by lapse of time or otherwise, such holding over shall, unless otherwise agreed to by Licensor in writing, constitute and be construed as a tenancy at will at a monthly License Fee equal to twelve and one-half percent (12.5%) of the annual License Fee last paid and subject to all of the other terms set forth herein including the annual percentage increase.

### 13. Default and Remedies.

(a) The occurrence of any one or more of the following events shall constitute an "event of default" or "default" under the particular Site License(s) to which it applies:

(i) if Licensee fails to pay any License Fee or other sums payable by Licensee under the Site License as and when the License Fee or other sums become due and payable and such failure

continues for more than ten (10) days after written notice thereof from Licensor is received pursuant to Section 16;

(ii) if Licensee upon actual receipt of any formal written order or directives relating to the Site from any governmental entity fails to comply with such order or directive within the time limits set forth in such order or directive and any applicable administrative or judicial appeal rights having been exhausted;

(iii) if Licensee fails to perform or observe any other term of the applicable Site License(s), and such failure continues for more than fifteen (15) days after written notice thereof from Licensor or in the event of a default which cannot, with due diligence be cured within a period of fifteen (15) days, if Licensee does not duly institute within such fifteen (15) day period steps to remedy the same and the same is not remedied within thirty (30) days or such longer period as mutually agreed by the parties hereto;

(b) The occurrence of any one or more of the following events shall constitute an "event of default" or "default" of this Agreement and all Site Licenses:

(i) if any petition is filed by or against Licensee, under any section or chapter of the present or any future federal Bankruptcy Code or under any similar law or statute of the United States or any state thereof (and with respect to any petition filed against Licensee and such petition is not dismissed within ninety (90) days after the filing thereof), or Licensee shall be adjudged bankrupt or insolvent in proceedings filed under any section or chapter of the present or any future federal Bankruptcy Code or under any similar law or statute of the United States or any state thereof;

- (ii) if Licensee becomes insolvent or makes a transfer in fraud of creditors;
  - (iii) if a receiver, custodian, or trustee is appointed by Licensee or for any of the assets of Licensee which appointment is not vacated within ninety (90) days of the date of the appointment;
  - (iv) if Licensee fails to perform or observe any other term of the Agreement other than a default allocable to a particular Site License, and such failure continues for more than fifteen (15) days after written notice thereof from Licensor or in the event of a default which cannot, with due diligence be cured within a period of fifteen (15) days, if Licensee does not duly institute within such fifteen (15) day period steps to remedy the same and the same is not remedied within thirty (30) days or such longer period as mutually agreed by the parties hereto.
- (c) In any notice of an alleged default by Licensee from Licensor, Licensor shall specify the nature of the default and the Site License(s) potentially affected thereby. After applicable notice and grace periods have expired, at any time thereafter that Licensee remains in default, Licensor may terminate the Site License(s) directly affected by such default and, if all Site Licenses shall be affected, this Agreement, without notice or demand. Upon the applicable termination, Licensee shall immediately surrender all applicable Sites then licensed to Licensee under the affected Site License to Licensor and, subject to Subsection 4(g), remove all of its facilities and equipment therefrom. If Licensee fails to promptly remove all of its facilities and equipment from the Premises, Licensor may remove the same (without any liability to Licensee for any damage to such equipment and/or facilities which may result from reasonable efforts at removal), and Licensee shall pay to Licensor on demand any and all costs incurred by Licensor in removing and storing such facilities and equipment prior to retrieval of same by Licensee.
- (d) If either Licensor or Licensee shall be delayed or prevented from the performance of any act required hereunder by reason of acts of God, governmental restrictions, regulations or controls (except those reasonably foreseeable in connection with the uses contemplated by this License), or other cause without fault and beyond the control of the party obligated (except financial inability), performance of such act shall be excused for the period of the delay and the period for the performance of any such act shall be extended for a period equivalent to the period of such delay. Nothing in this clause shall excuse Licensee from prompt payment of any rent, taxes, insurance or any other charges required of Licensee.
- (e) In the event of a termination of a Site License, it shall be lawful for Licensor, after not less than thirty (30) days' prior written notice, to reenter into and upon the Site, and every part thereof, and to remove at Licensee's expense all of Licensee's property therefrom and to repossess and occupy the Site. In the event Licensor terminates a Site License pursuant to this Section, Licensor shall not be required to pay Licensee any sum or sums whatsoever related to that Site License.

14. Warranties/Disclaimer.

(a) Licensors represents and warrants that:

(i) With respect to each particular Site, Licensors owns or has control of the land on which the Site and Premises is located and has the right to enter into the Site License with Licensee with respect thereto and if Licensors is leasing a particular Site, a copy of the underlying Lease, License, Right-of-Way deed or other instrument will be attached to the individual Site License.

(ii) Subject to Subsection 14(c) below and except as otherwise disclosed to Licensee in writing prior to the execution of any Site License, there are, to Licensors's actual knowledge (without any independent investigation), no known liens, restrictions, mortgages, covenants, conditions, easements, leases, agreements of record or not of record, which would adversely affect or prohibit Licensee's use and enjoyment of the Premises under a Site License.

(iii) Subject to Subsection 14(c) below, Licensee shall have access to the Site and Premises and the quiet and peaceful use, enjoyment and possession of the Site and Premises during the term for its permitted uses.

(iv) Except as specifically set forth in an individual Site License, Licensors represents to the best of its knowledge no Hazardous Substances are present on, in or under the Premises or Site in violation of applicable law, and, to the best of Licensors's knowledge: (i) all operations on the Premises and Site are and have been in substantial compliance with all laws regulating such Hazardous Substances, (ii) no litigation has been brought or threatened, nor any settlements reached with any governmental, quasi-governmental entity or private party concerning the actual or alleged presence, disposal, release or threatened release of such Hazardous Substances in, on, about or under the Premises or Site, and (iii) Licensors has not received notice of any violation, or any alleged violation of any law related to Hazardous Substances and relating to the Premises or Site. "Hazardous Substances" includes substances, chemicals or wastes that are identified as hazardous, toxic or dangerous in any applicable federal or state law.

(aa) Nothing herein will be construed or interpreted to require that Licensors remediate any Hazardous Substance at any Site. If Licensee discovers hazardous substances on the Site during the Local Permitting Period, its sole remedy will be to cancel the Site License. Any work needed to remove or remediate any Hazardous Substance or other Environmental Hazard that requires the removal or relocation of Licensee's equipment will be treated as "Licensors's use of a Site" pursuant to Subsection 4(e).

(b) Licensors and Licensee represent and warrant to each other that:

(i) it has full right to make this Agreement;

(ii) the making of this Agreement and the performance thereof will not violate any laws, ordinances, restrictive covenants, or other agreements under which it is bound;

(iii) it is fully organized/formed, validly existing and in good standing and has all rights, power and authority to make this Agreement and bind itself hereto through the party set forth as signatory set forth below; and,

(iv) neither party has liability for any brokerage commission due to any broker in connection with this Agreement or any Site License.

(c) Except as expressly provided herein, Licensors does not warrant:

(i) the suitability of any particular Site for the purposes contemplated hereunder, including without limitation the adequacy of such Site's location, its condition, or the condition of any structure or appurtenances thereto; or,

(ii) whether Licensee will be required to obtain (or will be able to obtain) any licenses, permits or approvals or any applicable governmental authority necessary for Licensee's Operations at any particular Site.

#### 15. Prohibited Uses.

The following activities are prohibited on the Premises:

(a) Unlawful use or storage of any hazardous substance or hazardous chemical as those terms are used in CERCLA (42 U.S.C. 9601(14)) or SARA (42 U.S.C. 110211(e)) or any similar federal or state law, or any pesticide, oil petroleum product or fuel; except only materials packaged and purchased for consumer use in containers not to exceed one gallon or fuel in a vehicle fuel tank. Use of pesticides should be minimized, and will be applied only by authorized personnel and in accordance with all applicable laws, regulations, and label instructions. All aerial applications are prohibited. Back-up generators and the storage of fuel for said generators shall only be allowed if provided in a particular Site License under the conditions of that Site License.

(b) Accumulation, storage, treatment, or disposal of any waste material is prohibited; excepting only temporary storage, not to exceed fourteen (14) days, or nonhazardous solid refuse produced from activities on the Premises for pick up by municipal or licensed commercial refuse service, and lawful use of sanitary sewers (if any) for domestic sewage.

(c) Manufacturing; maintenance of equipment (excluding communications equipment and back-up power sources such as batteries and generators operated pursuant to the Site License Agreement) or vehicles, or use, installation or construction of vessels, tanks, (stationary or mobile), dikes, sumps, or ponds; or any activity for which a license or permit is required from any government agency for (1) transportation, storage, treatment, or disposal of any waste, (2) discharge of any pollutant including but not limited to discharge to air, water, or a sewer system is prohibited.

(d) Any spill caused by Licensee or from Licensee's equipment resulting in a release of a hazardous material to the air, soil, surface water, or groundwater in violation of applicable law will be immediately reported to Licensor as well as to appropriate government agencies and shall be promptly and fully cleaned up and the Premises (including soils, surface water, and groundwater) restored to its condition existing immediately prior to such spill or release, all in accordance with and as may be required by applicable law.

(e) Should Licensee desire to use pesticides on the Site or Premises (either herbicides, rodenticides, or insecticides) all applicable Environmental Protection Agency (EPA) standards must be met and prior approval must be received from Licensor and not all EPA approved pesticides will be permitted. Licensee will fill out form FG-880 and submit it to the area manager at least seven (7) days prior to application of pesticides. Licensor reserves the right to disapprove the use of any pesticide. Licensee shall obtain all county, state or federal permits required, including restricted pesticide use and burning permits and comply with all conditions of those permits. Licensee shall submit to the area manager a copy of all permits.

#### 16. Notices.

Unless otherwise provided herein, any notice or demand required or permitted to be given hereunder shall be given in writing by hand delivery, first class certified or registered mail, return receipt requested, or by recognized overnight mail, in a sealed envelope, postage prepaid, to be effective when received or refused. Notice shall be addressed to the parties at the addresses set forth on the signature pages. Either party hereto may change the place for the giving of notice to it by like written notice to the other as provided herein.

#### 17. Miscellaneous.

(a) This Agreement and the Site Licenses constitute the entire agreement and understanding between the parties, and supersede all offers, negotiations and other agreements concerning the subject matter contained herein. Any amendments to this Agreement or any Site License must be in writing and executed by both parties.

(b) If any provision of this Agreement is invalid or unenforceable with respect to any party, the remainder of this Agreement or the application of such provision to persons other than those as to whom it is held invalid or unenforceable shall not be affected and each provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law. To the extent any provisions of this Agreement are in conflict with, or inconsistent with regulations or rules promulgated by the California Public Utilities Commission such provisions shall be null and void.

(c) This Agreement and the Site Licenses shall be binding on and inure to the benefit of the successors and permitted assignees of the respective parties.

(d) This Agreement and each Site License shall be governed by the laws of the State of California without regard to any conflict of laws doctrine. Licensor and Licensee agree



that any dispute, action or proceeding arising out of this Agreement or any Site License shall be subject to the jurisdiction of the Superior Courts of the State of California, and shall be venued in the County of Sacramento with respect to disputes arising out of this Agreement, and venued in the county in which the Site is located for disputes arising out of an individual Site License.

(e) Licensee may record an appropriate Notice or Memorandum of any Site License.

(f) In any case where the approval or consent of one party hereto is required, requested or otherwise to be given under this Agreement or any individual Site License, such party shall not unreasonably delay, withhold or condition its approval or consent.

(g) All riders and Exhibits annexed hereto form material parts of this Agreement.

(h) This Agreement may be executed in duplicate counterparts each of which shall be deemed an original.

(i) Licensee will not discriminate against any employee or applicant for employment because of race, color, religion, ancestry, sex, age, national origin, or physical handicap. Licensee will take affirmative action to insure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, ancestry, sex, age, national origin or physical handicap. (See California Government Code Sections 12920-12994 for further details.)

(j) Licensee shall not commit, suffer, or permit any waste on the licensed Site or any acts to be done thereon in violation of any laws or ordinances, and shall not use or permit the use of the licensed Site for any illegal or immoral purposes.

#### 18. Administrative Fee.

(a) Licensee shall pay a one-time charge of \$1,000.00 when applying for a Site License to cover the costs associated with the preparation and the engineering and technical analysis of the Site License to assure complete compatibility of operations at the Site. This payment will entitle Licensee to the Local Permitting Period without additional charge. This amount may be periodically adjusted to reflect an actual change in the costs incurred by Licensor with the preparation and the engineering and technical analysis for the Site. This is in addition to general permits required by any party entering Licensor's property, especially if entry is sought for an access-controlled roadway, such as annual district survey permit, encroachment permits, or maintenance permits.

#### 19. Licensee Casualty Responsibilities.

Licensor will not keep improvements which are constructed or installed by Licensee under the provisions of this Agreement insured against fire or casualty, and Licensee will make no claim of any nature against Licensor by reason of any damage to the business or property of Licensee in the event of damage or destruction by fire or other cause. Licensee is

solely responsible for insuring, or self-paying, all expenses caused by the destruction or damage of its facilities regardless of cause or fault.

20. Relocation Assistance.

Licensee acknowledges it is not entitled to any relocation assistance payments at the conclusion of this Agreement or any Site License under State (Government Code Section 7260 et seq.) or federal law (42 U.S.C.A. 4601 et seq.), and Licensee further agrees it will not file or pursue any such claim.

21. Co-location - Licensors.

(a) Unless otherwise specified in a Site License, the facility to be constructed by Licensee at that particular Site shall be built to include the following specifications to allow for Licensors's possible use, at no cost to Licensors:

(i) If Licensee will be constructing a monopole or other tower at the Site for its use, such tower/monopole shall, upon completion of construction, be available to Licensors to use for one 800 MHZ omni antenna approximately 44" long, 1.5" in diameter, with a weight not to exceed twenty pounds, to be mounted at a height designated by Licensee, not less than twenty feet (20') high.

(ii) If Licensee will be constructing a vault at the Site, Licensee shall make available, upon completion of initial construction, a 2' x 2' x 7' space for Licensors's equipment; if Licensee will be constructing an equipment pad, Licensee shall make available, upon completion of initial construction, at least 2.5' x 2.5' of space for Licensors's equipment cabinet.

(iii) Conduit or a cable tray for transmission from equipment area to antenna.

(iv) Cable access to phone and electrical lines.

(b) If Licensors chooses to occupy a tower/monopole built by Licensee, it may engage a contractor to install its equipment on Licensee's facilities. Licensee reserves the right to approve Licensors's list of contractors prequalified to perform the equipment installation. Contractors utilized by Licensors must all provide proof of adequate insurance coverage and must name Licensee as an additional insured. Licensee shall inspect the installation and advise Licensors of any deficiencies noted. Alternatively, Licensors may request that Licensee install Licensors's equipment. All expenses that Licensee actually incurs for ancillary equipment purchased or installed for the benefit of Licensors, or for radio tower work performed by Licensee for the benefit of Licensors, shall be at State expense, provided that such costs are commercially competitive and documented in reasonable detail.

(c) When Licensors occupies a tower/monopole constructed by Licensee, the parties agree to negotiate in good faith issues concerning such occupation by Licensors, including but not limited to issues relating to insurance, maintenance, interference and indemnity. If parties

other than Licensee will co-use a Site with Licensee, it shall be Licensor's responsibility to ensure, through the use of its approval rights set forth in Section 22, that any space reserved for Licensor pursuant to this Section 21 remains available and technically feasible with respect to structural and technical interference issues.

## 22. Co-location - Third Party.

(a) Licensee shall not hinder the co-use of a Site by another company and Licensee may permit the use by third parties of space on facilities constructed by Licensee on a Site, with Licensor's prior written permission. Licensee shall not allow the use of any space on any facility which, in Licensor's sole opinion, results in any interference with Licensor's operations, communication systems, microwave antennas, and/or other equipment, or would prevent Licensor from utilizing its reserved space as set forth in Section 21. Licensee may charge a fee for the use of tower space and/or building space by third parties, under written agreements with those third parties, within the usual parameters of industry practice. Copies of the agreements between Licensee and the third parties shall be provided to Licensor. For third-party co-locations situated entirely within the Site (each a "Sub-Use"), Licensor shall be paid by Licensee fifty percent (50%) of the gross monies paid by the third party to Licensee (but not including any portion of the amount charged the third party to compensate Licensee for the recoupment of all or any portion of its construction and installation costs, including engineering and entitlement expenses) or fifty percent (50%) of the then current License Fee, whichever is highest. For third-party co-locations requiring additional or separate land space on the Premises (each a "Direct-Use"), Licensor will have a separate license agreement with each third party using the Premises, the term of which will be co-terminus with Licensee's Site License and the License Fee for which shall be paid to Licensor. Any third party seeking to co-locate on Premises with an existing telecommunications licensee, whether under a Sub-Use or a Direct-Use, will be required to fulfill all of Licensor's review procedures and approvals.

(b) Licensee may not refuse to negotiate in good faith or to enter into agreements on equitable terms with any interested third party for the occupation of a facility built by Licensee, unless occupation will result in interference with Licensor's operations, communications systems, microwave antennas and/or other equipment.

## 23. Annual Financial Statements.

Licensee shall submit its most recent annual financial statement to Licensor prior to Licensor executing any Site License with Licensee; thereafter, Licensee shall submit its most recent annual financial statement on or before June 30 of each year this Agreement or any Site License remains in effect. Licensor shall not enter or renew any Site License if, based on a review of the financial statement, Licensor determines, in its sole opinion, that Licensee cannot perform the financial obligations of this Agreement and/or any Site License. Copies of annual financial statements filed with the Securities and Exchange Commission (ÒSECÓ) shall fulfill this requirement; if Licensee is not a publicly traded corporation, then an audited financial statement will be required. If Licensee desires to fulfill this requirement by

submitting the Annual Financial Statement of a parent or affiliated corporation, then that parent or affiliated corporation shall guarantee Licensee's performance of all obligations required by this Agreement and any Site License.

EXECUTED ON: \_\_\_\_\_

LICENSEE: \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

Address: \_\_\_\_\_

LICENSOR: State of California, Department of Transportation (Caltrans)

By: \_\_\_\_\_

Program Manager, Right of Way

1120 "N" Street, Sacramento, CA 95814

## **District Encroachment Permit Offices**

District 01  
1656 Union Street (95501)  
P.O. Box 3700  
Eureka, CA 95502  
(707) 445-6385

District 02  
1657 Riverside Drive (96001)  
P.O. Box 496073  
Redding, CA 96049-6073  
(916) 225-3400

District 03  
625 B Street  
P.O. Box 911  
Marysville, CA 95901  
(916) 741-4403

District 04  
111 Grand Avenue, 6th Floor  
P.O. Box 23660  
Oakland, CA 94623  
(510) 286-4401

District 05  
50 Higuera Street  
San Luis Obispo, CA 93401-5415  
9808) 549-3152

District 06  
1333 West Olive Street (93728)  
P.O. Box 12616  
Fresno, CA 93728  
(209) 488-4289

### **Satellite Offices:**

Kern Co. Permit Assistance Center  
2700 M Street, Suite 125  
Bakersfield, CA 93301  
(805) 862-5175

Fresno Co. Permit Assistance  
Center  
2600 Fresno Street, 3rd Floor  
Fresno, CA 93721  
(209) 498-1343

District 07  
120 South Spring Street, Rm. 112  
Los Angeles, CA 90012  
(213) 897-3631

### **Satellite Office:**

950 County Square Drive, Suite 112  
Ventura, CA 93003

District 08  
621 Carnegie Drive, Suite 270 (92403)  
P.O. Box 231  
San Bernardino, CA 92402  
(714) 383-4536

District 09  
500 South Main Street  
Bishop, CA 93514  
(619) 872-0674

District 10  
1976 East Charter Way  
P.O. Box 2048  
Stockton, CA 95201  
(209) 948-7891

District 11  
4080 Taylor Street (92110)  
P.O. Box 85406  
San Diego, CA 92186-5406  
(619) 688-6843

District 12  
2501 Pullman Street, Bldg. B  
Santa Ana, CA 92705  
(714) 724-2260

## **DISTRICT LANDSCAPE ARCHITECTS AND ROADSIDE REST COORDINATORS**

(8/14/96 sde)

<b>DISTRICT</b>	<b>NAME</b>	<b>PUBLIC#</b>
HQ	<b>Mike Yanceff</b>	(916) 454-2951
Northern Region	<b>Tom O'Donnell</b>	(916) 741-4436
4	<b>Lyle Oehler</b>	(510) 286-5918
5	<b>Gregg Albright</b>	(805) 549-3380
6	<b>Lori Butler</b>	(209) 488-4040
7	<b>Bill Koval</b>	(213) 897-0624
7	<b>Dennis Snyder</b>	(213) 897-4299
8	<b>George Nadow</b>	(909) 383-4519
9	<b>Jim Pittman</b>	(619) 872-0788
10	<b>Don Chin</b>	(209) 948-3655
11	<b>Tom Ham</b>	(619) 688-6719
11	<b>Ray Traynor</b>	(619) 688-6738
12	<b>Sandy Ankhasirisan</b>	(714) 724-2449

NOTE: There are no roadside rests in District 7 or 12

ALSO: Note Safety Roadside area Map that 364 is closed, a new roadside rest was added near Sausalito called H. Dana Bower, Turlock (#44, #45) was changed to "Enoch Christoffersen," and Corning (#21, #22) was changed to "Lt. John Helmic."

# OFFICE OF RADIO COMMUNICATIONS ENGINEERING & MAINTENANCE

DISTRICT	NAME	PUBLIC#	CALNET#
HQ	Gary Adams	(916) 654-5642	8-464-5648 8-464-3862 Fax (916) 551-4779 Pager
			<a href="mailto:GADAMS@TRMX3.DOT.CA.GOV">GADAMS@TRMX3.DOT.CA.GOV</a> Internet CALTRANS.TRMAIL4.GADAMS Groupwise
7	Roger Douglas	(213) 897-4275  (213) 565-6390 Pager	8-647-4275 8-647-0897 Fax
6	Paul Gonzalez	(209) 445-6834  (209) 472-4148 Pager	8-421-6834 8-421-6835 Fax
			TPAULG@TRMX3.DOT.CA.GOV Internet T6MAIL.T6MAIL1.paulg Groupwise
4	Lenny Mundt	(916) 654-6661  (916) 551-4784 Pager	8-464-6661 8-464-3862 Fax
			LMUNDT@TRMX3.DOT.CA.GOV Internet
HQ	Cheryl Soto	(916) 654-4321  (916) 551-4813 Pager	8-464-4321 8-464-3862 Fax
			CSOTO@TRMX3.DOT.CA.GOV E-Mail
8, 11 & 12	Bill Wray	(909) 383-6294  (909) 422-4755 Pager	8-670-6294 8-670-4788 Fax
HQ	John Schmidt	(916) 654-6709  (916) 551-4810 Pager	8-464-6709 8-464-3862 Fax
			JSCHMIDT@TRMX3.DOT.CA.GOV Internet

# Memorandum

To : DISTRICT PERMIT ENGINEERS

Date : December 31, 1996

File No. : 429

From : DEPARTMENT OF TRANSPORTATION  
Traffic Operations

Subject : Encroachment Permit Procedures for Wireless-Communication Sites In State Right-Of-Way

In a memorandum dated November 25, 1996 Mr. Don Benjamin, Program Manager, Design and Local Programs (DLP), delegated the exception approval of wireless sites and access to wireless sites within limited access right-of-way to the Districts' Airspace Review Committee (DARC). This and the development of new procedures to allow the leasing of Caltrans properties for telecommunications (wireless) service providers prompted us to send this memorandum clarifying our role in the process.

All wireless related encroachment permits shall be treated as Actual Cost Permits (AX) unless specified otherwise.

## **Site Survey Permits (Pre-Construction)**

District Permits can issue one annual site survey permit per wireless service provider for all highways, including access-controlled highways within the district. An annual deposit of \$700.00 shall be submitted by applicant for such permits. Work in U.S. Forest Service and other leased or prescriptive right of way is not authorized unless approved by the property owner. Upon approving the permit, forward a copy of the permit to the District Airspace Manager, and the Headquarters Airspace Program Manager.

The issued permits should include:

1. General Provisions and Standard Special Provisions for survey work on conventional and access controlled highways.
2. Any special requirement needed for the district to ensure they have adequate time to evaluate how the work at an individual site may affect safety, operation, or the environment.
3. A requirement that each site survey has specific approval by the State representative.
4. Appropriate district procedures to ensure that highway traffic is not impacted by the work. Although not normally an option, the districts may allow work at some marginal sites if safety and operation concerns are mitigated through special work hours and traffic control. If traffic control is approved the public notification requirements should conform to Caltrans and district standards.



5. The primary contact persons who will approve routine work, or start to coordinate appropriate safety, operations, or environmental reviews. These contacts should include the permit representatives responsible for active highway right-of-way, and the District Airspace Manager who will obtain approval for work in nonoperating right-of-way, or properties controlled by Facilities Management.

The Permit Engineer should make normal requirements for safety and operation, or request additional information if any special review is needed. At locations where the work is in nonoperating right-of-way (i.e., maintenance yards, parking lots) the Permit Engineer shall refer the company to the District Airspace Manager for approval to test specific sites.

## **Constructing Individual Wireless Sites**

### **Permits for Access Controlled Right Of Way (Airspace Leases)**

Involvement by the District Permit Staff in such a situation is minimal, and the District Airspace Manager will ensure that the proper reviews are completed. A Right-Of-Way procedure is already in place to have preliminary proposals reviewed through DARC prior to coordinating a detailed plan review and obtaining approval.

The Airspace Manager will supply a completed application, three sets of plans, and verification of approval by appropriate review units for leased right-of-way sites. No additional reviews are required and Fee Exempt Permits are issued in accordance with current airspace procedures in Encroachment Permit Manual Section 501.3. Other than agreed upon inspections to protect public safety or State facilities, the Permit Office is not involved in construction.

### **Permits for Conventional Highway Right Of Way**

Wireless communications providers have the same right to use State conventional right-of-way as more traditional utilities. Airspace leases are not issued for wireless communication facilities in conventional highway right-of-way. Although standard district permit review procedures are followed, permit engineers may consult those district units involved in the DARC reviews for assistance in standardizing installations. The Utility Coordinator is the Right-Of-Way representative for conventional highways and will make recommendations in lieu of the Airspace Manager as is done for access controlled property.

Applicable requirements for these installations are:

1. Transmission towers, antennas, service or splice boxes, pedestals, connecting cables and access driveways are authorized when suitable installation locations outside the right-of-way are not available.

2. Other than equipment vaults or pedestals, necessary for transmitter operation, permanent buildings and storage structures are prohibited within State right-of-way.
3. Wireless-communication sites in the right of way should not restrict access to other utilities, interfere with existing highway facilities, or obstruct future highway design.
4. No facilities are allowed in adopted or proposed scenic highway corridors.
5. At a minimum the reviews must ensure that the sites do not create an obstacle in the clear recovery area, present a visual obstruction to highway users, or require removal of trees and other landscaping.
6. Districts should encourage applicants to construct towers and antennas that are aesthetically pleasing.
7. Other utility owners providing service connections shall have valid UE maintenance permit, or a separate permit to cover the work at an individual site.
8. Headquarters Encroachment Permits shall approve deviations from these requirements.

## **Future Maintenance of Facilities**

Encroachment permits are issued for wireless-communication owners to perform routine and emergency maintenance on their facilities. Districts may issue these permits for sites located in conventional and access controlled right-of-way. Authorized work includes replacing damaged equipment, upgrading or modifying existing equipment, and maintaining access to the sites. A permittee shall not make additions to site equipment, change access locations, or allow attachments or modifications to their equipment that would result in use by other utility providers. The permits are valid for two year periods and may allow contractors that are shown on a district approved list to perform minor work for the permittee. Permittee must obtain encroachment permit riders for deletions or additions to the approved list.

The districts shall require a minimum \$700.00 fee for a two-year permit processing and inspection covering both conventional and access controlled highways.

Applicants are responsible for all costs associated with the proposals. Caltrans recovers these costs through the airspace leases for site construction in access control, and with AX permits for site surveys and work in conventional highways.

Please inform district staff involved in permit processing, review and approval of the new procedures. A complete manual revision will include these changes.

If you have any questions you may call me at Calnet 464-6232 or Mr. Joe Koski at Calnet 453-1559.

ZOUHEIR BARAZI, Chief  
Encroachment Permits Branch

JKoski:mf

bc: Susan Ellis, Right of Way  
Don Benjamin, DLP  
JVanBerkel  
ZBarazi  
JKoski  
PCaruso  
JMorones  
JSanders  
EP File 429  
Traffic Ops  
File: wireless.wp

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**ENCROACHMENT PERMIT GENERAL PROVISIONS**  
TR-0045 (REV. 9/95)

1. **AUTHORITY:** Encroachment permits are issued under the authority given the Department, Div. 1. Chpt. 1, Art. 3 in accordance with Div. 1, Chpt. 3, Art. 1, Sect. 660 to 734 of the Streets and Highways Code.
2. **REVOCATION:** Encroachment permits are revocable on five days' notice, unless otherwise stated on the permit, and except as provided by law for public corporations, franchise holders, and utilities. These General Provisions and the Encroachment Permit Utility Provisions are subject to modification or abrogation at any time. Permittees' joint use agreements, franchise rights, reserved rights, or any other agreements for operating purposes in State highway rights of way are an exception to this revocation.
3. **DENIAL FOR NONPAYMENT OF FEES:** Failure to pay permit fees when due can result in rejection of future applications and denial of permits.
4. **ASSIGNMENT:** No party other than the Permittee or permittees' authorized agent is allowed to work under this permit.
5. **ACCEPTANCE OF PROVISIONS:** Permittee understands and agrees to acceptance of the provisions and all attachments to this permit, for any work to be performed under this permit.
6. **BEGINNING OF WORK:** It is the responsibility of the Permittee to notify the Departments' Representative, two (2) days in advance of the intent to begin work under this permit. Permittee shall notify the Departments' Representative if the work is to be interrupted for a period of five (5) days or more, unless a prearranged continuance of work agreement had been made. All work shall be performed on weekdays during regular work hours, excluding holidays, unless otherwise specified in this permit.
7. **STANDARDS OF CONSTRUCTION:** All work performed within highway rights of way shall conform to recognized construction standards and current Department Standard Specifications, High and Low Risk Facility Specifications, and Utility Special Provisions. Where reference is made to "Contractor and Engineer", these are amended to be read as "Permittee and Department Representative".
8. **INSPECTION AND APPROVAL:** All work shall be subject to monitoring, and inspection. Upon completion of work permittee shall request a final inspection for acceptance and approval by the Department. The local agency permittee shall not give final construction approval to its contractor until the local agency has obtained final acceptance and approval from the Department.
9. **PERMIT AT WORKSITE:** The Permit Package or a copy of, shall be kept at the work site and must be shown upon request to any Department Representative or Law Enforcement Officer. It is a violation of permit conditions and work shall be suspended if the Permit Package is not kept and available at the work site.
10. **CONFLICTING ENCROACHMENTS:** Permittee shall yield start of work, to ongoing prior authorized work adjacent to or within the limits of the project site. When existing encroachments conflict with new work, the Permittee is solely responsible for any and all cost for rearrangements necessary (relocation, alteration or removal of).
11. **PERMITS FROM OTHER AGENCIES:** This permit shall be invalidated if the Permittee has not obtained all permits necessary and required by law, from the Public Utilities Commission of the State of California (PUC), California Occupational Safety and Health Administration (CAL-OSHA), or any other public agency having jurisdiction.
12. **PEDESTRIAN AND BICYCLIST SAFETY:** A safe minimum passageway of 1.21 meter (4') shall be maintained through the work area, where pedestrian or bicycle facilities are existing. At no time shall pedestrians be diverted onto a portion of the street used for vehicular traffic. At locations where safe alternate passageways cannot be provided, appropriate signs and barricades shall be installed at the limits of construction and in advance of the limits of construction at the nearest crosswalk or intersection to detour pedestrians to facilities across the street.
13. **PUBLIC TRAFFIC CONTROL:** Required by law, the Permittee is to provide traffic control protection of warning signs, lights, safety devices and other measures for the safety of the traveling public. Day and Nighttime lane closures shall be in compliance with the Manual of Traffic Controls, Standard Plans and Standard Specifications for traffic control systems. It is not intended, as to third parties, to impose on the permittee any duty or standard of care, greater than or different from, as required by law.
14. **MINIMUM INTERFERENCE WITH TRAFFIC:** Work shall be planned and conducted so as to create the least possible inconvenience to the traveling public, traffic shall not be unreasonably delayed. On conventional highways, Permittee is authorized to place properly attired flagger(s) to stop or warn the traveling public. All flagging procedures shall be in compliance with the Manual of Traffic Controls and Instructions to Flaggers pamphlet.
15. **STORAGE OF EQUIPMENT AND MATERIALS:** Equipment and Material storage in State rights of way shall be in compliance Standard Specifications, Standard Plans and Special Provisions. Where any Permittee obstacle is placed within twelve (12) feet of a lane carrying public traffic, the Permittee shall install temporary railing Type K).
16. **CARE OF DRAINAGE:** Permittee shall provide alternate drainage for any work interfering with an existing drainage facility in compliance with the Standard Specifications, Standard Plans and/or as directed by the Department's Representative.
17. **RESTORATION AND REPAIRS IN RIGHTS OF WAY:** Permittee is responsible for restoration and repair of State Highway rights of way resulting from permitted work, per State Highway Code, Sections 670 et. seq.
18. **RIGHTS OF WAY CLEAN UP:** Upon completion of work Permittee shall remove entirely and dispose of all scraps, brush, timber, materials, etc., off the rights of way. The aesthetics of the highway shall be as it was before work started.
19. **COST OF WORK:** Unless stated in the permit, or separate written agreement, all costs incurred for work within the State rights of way pursuant to this encroachment permit shall be borne entirely by the Permittee. Permittee hereby waives all claims for indemnification or contribution from the State for any such work.
20. **ACTUAL COST BILLING:** When Permittee is to be billed actual costs, (as indicated on the face of the permit), such costs will be at the currently set hourly rate for encroachment permits.
21. **AS-BUILT PLANS:** When required, Permittee shall submit one (1) set of as-built plans in compliance with Department requirements. Plans shall be submitted within thirty (30) days after completion and approval of work.
22. **PERMITS FOR RECORD PURPOSES ONLY:** When work in rights of way is within an area under a Joint Use Agreement (JUA) or a Consent to Common Use Agreement (CCUA), an Exempt Permit will be issued to the Permittee for the purpose of providing a notice and record of work. All prior rights of the permittee shall be preserved, no new or different rights or obligations are intended to be created. "Notice and Record Purposes Only" shall be stamped across the face of the permit.

23. **BONDING:** Permittee shall file the necessary bond(s) in advance, in the amount set by the Department. Failure to maintain bond(s) in full force and effect will result in suspension of all work and permit(s). Bonds are not required of public corporations or privately owned utilities, unless said Permittee failed to comply with the provisions and conditions under a prior permit. Your surety company will be responsible for any latent defects until such time as is provided for in California Code of Civil Procedures, Section 337.15. Local agency permittee shall comply with requirements established as follows: In recognition that project construction work done on State property will not be directly funded and paid by State, for the purpose of protecting stop notice claimants and the interests of State relative to successful project completion, the local agency permittee agrees to require the construction contractor furnish both a payment and performance bond in the local agency's name with both bonds complying with the requirements set forth in Section 3-1.02 of State's current Standard Specifications prior to performing any project construction work. The local agency permittee shall defend, indemnify, and hold harmless the State, its officers and employees from all project construction related claims by contractors and all stop notice or mechanic's lien claimants. The local agency also agrees to remedy, in a timely manner and to State's satisfaction, any latent defects occurring as a result of the project construction work.

24. **FUTURE MOVING OF INSTALLATIONS:** Permittee understands and agrees that upon request of the Department, whenever State construction, reconstruction or maintenance work on the highway requires a permitted installation to be rearranged, the Permittee at his sole expense, unless under a prior agreement, JUA, and CCUA, shall comply with said request.

25. **ARCHAEOLOGICAL:** Should any archaeological sources be revealed in the work vicinity, the Permittee is responsible for; notifying the Department's Representative immediately, retainment of a qualified archaeologist who shall evaluate the archaeological site and make recommendations to the Department Representative regarding the continuance of work.

26. **PREVAILING WAGES:** Work performed by or under a permit may require Permittee's contractors and subcontractors to pay appropriate prevailing wages as set by the Department of Industrial Relations. Inquiries or requests for interpretations relative to enforcement of prevailing wage requirements should be directed to State of California Department of Industrial Relations, 525 Golden Gate Avenue, San Francisco, California 94102.

27. **RESPONSIBILITY FOR DAMAGE:** The State of California and all officers and employees thereof, including but not limited to the Director of Transportation and the Deputy Director, shall not be answerable or accountable in any manner for injury to or death of any person, including but not limited to the permittee, persons employed by the permittee, persons acting in behalf of the permittee, or for damage to property from any cause. The permittee shall be responsible for any liability imposed by law and for injuries to or death of any person, including but not limited to the permittee, persons employed by the permittee, persons acting in behalf of the permittee, or for damage to property arising out of work, or other activity permitted and done by the permittee under a permit, or arising out of the failure on the permittee's part to perform his obligations under any permit in respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work, or other activity or at any subsequent time work or other activity is being performed under the obligations provided by and contemplated by the permit.

The permittee shall indemnify and save harmless the State of California, all officers, employees, and state contractors, thereof, including but not limited to the Director of Transportation and the Deputy Director, from all claims, suits or actions of every name,

kind and description brought for or on account of injuries to or death of any person, including but not limited to the permittee, persons employed by the permittee, persons acting in behalf of the permittee and the public, or damage to property resulting from the performance of work or other activity under the permit, or arising out of the failure on the permittee's part to perform his obligations under any permit in respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work, or other activity or at any subsequent time work or other activity is being performed under the obligations provided by and contemplated by the permit, except as otherwise provided by statute.

The duty of the permittee to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code. The permittee waives any and all rights to any type of expressed or implied indemnity against the State, its officers, employees, and state contractors. It is the intent of the parties that the permittee will indemnify and hold harmless the State, its officers, employees, and state contractors, from any and all claims, suits or actions as set forth above regardless of the existence of degree of fault or negligence, whether active or passive, primary or secondary, on the part of the State, the permittee, persons employed by the permittee, or acting on behalf of the permittee.

For purposes of this section, "state contractors" shall include contractors and their subcontractors under contract to the State of California performing work within the limits of this permit.

28. **NO PRECEDENT ESTABLISHED:** This permit is issued with the understanding that it does not establish a precedent.

29. **FEDERAL CIVIL RIGHTS REQUIREMENTS FOR PUBLIC ACCOMMODATION :** A. The permittee, for himself, his personal representatives, successors in interest, and assigns as part of the consideration hereof, does hereby covenant and agree that: 1.) no person on the grounds of race, color, or national origin shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, 2.) that in connection with the construction of any improvements on said lands and the furnishing of services thereon, no discrimination shall be practiced in the selection of employees and contractors, by contractors in the selection and retention of first-tier subcontractors in the selection of second-tier subcontractors, 3.) that such discrimination shall not be practiced against the public in their access to and use of the facilities and services provided for public accommodations (such as eating, sleeping, rest, recreation), and operated on, over, or under the space of the right of way, 4.) that the permittee shall use the premises in compliance with all other requirements imposed pursuant to Title 15, Code of Federal Regulations, Commerce and Foreign Trade, Subtitle A. Office of the Secretary of Commerce, part 8 (15 C.F.R. Part 8) and as said Regulations may be amended. B. That in the event of breach of any of the above nondiscrimination covenants, the State shall have the right to terminate the permit and to re-enter and repossess said land and the facilities thereon, and hold the same as if said permit had never been made or issued.

30. **MAINTENANCE OF HIGHWAYS :** The permittee agrees, by acceptance of a permit, to properly maintain any encroachment. This will require inspection and repair of any damage to State facilities resulting from the encroachment.

# Memorandum

**To: CHAIR AND MEMBERS**  
Airspace Advisory Committee

Date: March 25, 1997

File: AIRSPACE  
General

**From: DEPARTMENT OF TRANSPORTATION**  
**RIGHT OF WAY PROGRAM, MS 37**

## Wireless Telecommunications Technology-Overview

This narrative, and an attachment on terminology, contains an overview of the wireless telecommunications technology for cellular mobile telephone (cellular) and Personal Communications Systems (PCS). In addition, representatives from Los Angeles Cellular Telephone Company (LACTC) and Sprint Spectrum will each make a 15-minute presentation on their respective technologies.

- Cellular/PCS technologies
- Benefits of Cellular/PCS technologies
- Site Selection Process
- Components of Cellular/PCS Technologies
- Types of Installations
- Benefits to the Department of Transportation

## AN OVERVIEW

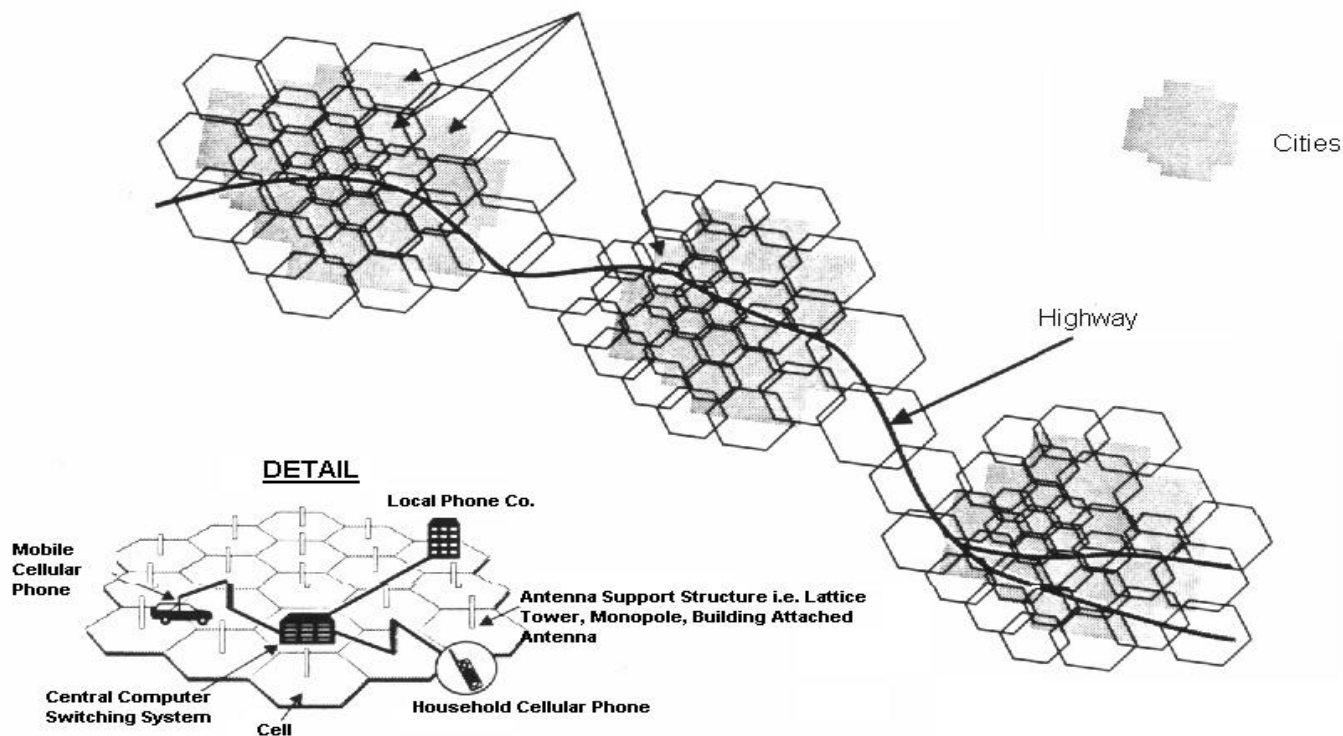
Wireless communications are transmitted through the air via radio waves of various frequencies. Cellular carriers operate at frequencies between 800 and 900 Megahertz (MHz) and Personal Communications Systems (PCS) operates at both 900 MHz and between 1850 and 2200 MHz. The technology to transmit their frequencies is similar to the honeycomb pattern of a beehive, with interconnecting "cell sites" or geographical areas that blanket a region. Figure 1 illustrates the relationship of cell sites within and between different geographical areas.

Cell sites tend to be smaller and more numerous in urbanized areas, and larger and less abundant in rural areas, as carriers build their facilities where their customers are. As more people demand wireless communications services, the wireless systems will require additional capacity to handle calls. This additional calling capacity can be acquired by either increasing the number of cell sites or changing to digital from analog technology. Most carriers are choosing to increase their capacity by combining the two methods.

Each cell site within a system contains transmitting and receiving antennas. Calls placed from a wireless phone or device are sent to a central computer switching system. The central switch completes the call by connecting it either to a conventional telephone through a land-based line, or to another mobile phone through the nearest antenna. As the mobile caller enters one cell and exits another, the call is transferred between the cells.

### CELL SITE SYSTEMS

#### CELL Sites within cities



There are three general types of transmitting and receiving antennas used in wireless communications technology. These include whip antennas, panel antennas, and dish antennas. While whip and panel antennas are used to transmit and receive radio waves carrying conversation signals, dish antennas provide the link between the central computer switching system and the various whip and panel antennas used throughout the mobile conversation.

*Whip Antenna:* generally 2 - 6 inches in diameter, 1 - 18 feet in length; emits signals in a 360-degree horizontal plane. Also known as: omnidirectional antenna.

*Panel Antenna:* generally 6 - 12 inches in diameter, 6 - 8 inches in depth, 4 - 5 feet in length; has vertical and horizontal planes that aim signals in specific directions. Also known as: sector antenna.

Both Whip and Panel antennas emit radio waves that carry the call between a wireless phone and its intended receiver.

*Dish Antenna:* generally 4 - 6 feet in diameter and 1.5 - 3 feet in depth; emits microwaves that provide the critical link between the central computer switching system and the appropriate transmitting or receiving antennas.

The three types of antennas function on a line of sight transmission, thus they need to be placed at specific heights in relation to one another in order to transmit and receive signals and are mounted on top of lattice towers, monopoles, or other structures (buildings, water towers, etc.) The lattice towers, ranging from 60 to 200 feet in height, have three or four support steel legs and hold a variety of antennas. They are used where great height is needed to accommodate many users, but they tend to be visually obtrusive. Monopoles, ranging in height from 25 to 125 feet, consist of a single pole and can accommodate different antennas, and are used where height is less important than visual impact. Antennas can also be mounted on existing structures, such as bridges, buildings, signs, and other types of towers when the structure is located at or near the area where the antennas need to be located. The antennas mounted on a building can be painted to blend in with the structure, thus easily disguised or hidden from view; however, the height and location of the existing building is fixed and can be a disadvantage if the structure is not located in the most suitable location for the antennas.

Cellular mobile telephone technology is composed of interconnected neighboring cell sites that operate facilities functioning on low amounts of electric energy. The cellular industry is limited to 45 MHz of spectrum bandwidth, which without frequency reuse, would limit each cellular carrier to 396 frequencies or voice channels. In order to increase calling capacity, these low power facilities "reuse" frequencies on the electromagnetic spectrum. The manner in which providers organize their cells is an important factor in increasing frequency reuse and establishing an area's calling capacity. Although a cell site's radius depends upon its surrounding topography and its capacity to handle calls, cell sites in rural areas generally have



a radius between five and eight miles, and cell sites in urban areas typically have a radius between two and five miles. 3 basic types of cell sites are:

1. Coverage sites - serve to expand coverage in large areas. Allow users to make and maintain calls as they travel between cells.
2. Capacity sites - serve to increase a site's capacity to handle calls when surrounding sites have reached their practical channel limits.
3. Transition sites - needed for frequency reuse. Allow the carrier to increase capacity of calls and maintain coverage simultaneously.

Traditionally, cellular phones have utilized analog transmission signals, transmitting voice messages electronically to the receiving antennas. The problem is that the amplification procedures tend to pick up "noise," making it difficult to hear the message. To diminish this noise and increase calling capacity, the cellular industry is beginning to use digital transmission signals. With digital technology, voice messages are converted into digits (using the binary system of zeros and ones), that represent sound intensities at specific points in time. Because natural pauses in the conversation are eliminated, more calling capacity becomes available from the same amount of spectrum, thus reducing the need for new sites.

There are currently two forms of digital technology: time division multiple access (TDMA) and code division multiple access (CDMA). Both forms attempt to provide multiple access over one frequency or channel. Whereas cellular carriers are in the process of converting to the digital technology, PCS is already using it.

PCS also functions as a pattern of cell sites, transmitting the incoming calls through a wireless switching office, but with the digital technology, the cell sites have a higher calling capacity than analog cellular cell sites. However, due to the PCS's higher frequencies, the cell sites will have smaller radii than cellular cell sites, resulting in a need for two to three times as many transmission sites.

## SITE LOCATION

The first critical step in locating a site is to conduct a zoning and site prequalification analysis within the specific area designated by the carrier's radio frequency (RF) engineer as an area where a change in capacity or coverage is required. Existing and possible sites are then overlaid onto a geographical map for a comprehensive study of the carrier's system. At this point, the possible sites will be selected or eliminated depending upon how crucial they are to improving the system. The RF engineer looks at the wireless network being designed to ensure the technology utilized, population densities, and projected coverage areas will meet the objectives of the carrier's build-out plan.

After determining which sites are needed for the expansion of the system, the site acquisition team will be directed to lease (license) the preferred sites. Since the sites are "pre-qualified," the typical hold-up factors such as landlord willingness to lease, space availability, environmental considerations, and pricing issues will have been eliminated, clearing the way for quick and easy site acquisition. Once the site is lease, the required zoning and permitting processes may commence.

Cellular and PCS carriers prefer to locate facilities in primarily commercial and industrial areas due to local public agency restrictions to build in residential areas. Some of the criteria used to select the ideal site are listed below.

1. Existing structures, such as buildings, communication towers, water towers, etc., is encouraged.
2. Existing topography, vegetation, buildings, or other structures providing the greatest amount of screening is preferred.
3. Facilities should be located in a manner that preserves view corridors of surrounding development.
4. Colocation is preferred whenever possible.
5. Monopoles should be located on peaks or ridges to avoid a dominant protrusion.
6. The cross bar (device holding the antennas to the monopole) should be located below the tree line to mitigate its visual effect.
7. Electronic equipment cabinets should blend with the surrounding area in architectural design and color.

The intent of using the above criteria is to ensure the wireless communication facility is sited and designed to be sensitive to the setting in which it is placed while providing the best service to the carrier in its transmission of radio waves.

Sharing an approved site with another carrier, called colocation, can resolve some of these siting issues, but there are problems associated with colocation.

1. Creates signal interference horizontally and vertically, requiring additional area or height. In addition, the cumulative effect of adding multiple platforms holding the antennas may have a more significant aesthetic impact than several individual sites.

2. The antenna's structural design may not allow additional weight or wind loads from future antennas without significant modification and potential visual impacts.
3. Liability concerning personnel injury or antenna damage becomes an issue with shared sites.
4. Multiple users have compounded problems in adapting to new technologies.

Selection of a site suitable for a wireless facility is critical to the success of the cellular and PCS carrier's build-out plans. Whether it is working with the local public agencies on zoning issues, developing lease agreements with potential landlords, or marketing their new communication devices, the carriers are attempting to keep pace with this ever-changing industry to ensure that when the technology changes the way radio frequency waves are transmitted and received, the facilities are built to provide customers with immediate service.

#### SUMMARY

The San Diego Association of Governments issued a discussion paper on Wireless Communications in December 1995 that summarized the cellular and PCS markets by stating, "As these technologies evolve in response to increasing consumer demand for wireless services, providers will develop cell sites with smaller geographic radii, place antennas at lower heights, and install more antennas per square mile than in the past. Their 'common' goal is to integrate facilities into existing community structures by building rooftop or building mounted facilities, by designing fiberglass shrouds and creative screening, and by encouraging architecturally integrated and visually sensitive designs." As such, it seems the properties owned and operated by the Department, such as buildings, signs, and overcrossings, are perfect sites for the installation and operation of both cellular and PCS facilities.

(Sources used for this overview were: "Site Acquisition for Wireless Networks," January/February 1997, Right of Way Magazine; "The Superinformation Skyway," October 1996, Keith International; "Wireless Communications," December 1995, San Diego Association of Governments; and "Design Guidelines for Wireless Communications Facilities," undated, Pacific Bell Mobile Services.)

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Attachments:      Terms and Definitions  
                         LACTC Outline and Technical Brochure  
                         Sprint Outline and Technical Brochure

## **CALTRANS TERMINOLOGY and ACRONYMS**

**AAC:** Airspace Advisory Committee

**Access Control:** A right of way line where the abutting property owners have relinquished all (or limited) rights and easements for access to or from their lanes to the highway.

**Antenna Space:** The location of the antenna on the site's mounting structure(s) as recommended by the DGS-Telecommunications Division, or the connection point to the site's master-antenna multi-coupling system as engineered by the DGS-Telecommunications Division. The actual method of providing antenna service to the Applicant shall be determined by DGS-Telecommunications during the analysis of the TD-312 application. The Applicant will be notified by OREDS prior to lease preparation of how antenna service will be provided and the associated charges.

**Caltrans Maintenance Telecommunications Unit:** A Headquarters Unit with Telecommunications Engineers and Coordinators assigned to specific Districts.

**Caltrans:** California Department of Transportation

**Carrier:** A licensed telecommunications wireless carrier.

**CEQA:** California Environmental Quality Act as administered by the State Clearinghouse.

**Clear Recovery Zone:** {Section 309.1 (2) of the Highway Design Manual} An unobstructed, relatively flat or gently sloping beyond the edge of the traveled way which affords drivers of errant vehicles the opportunity to regain control. Minimum of 9m (30') for freeways, 6m (20') for uncurbed conventional highway, and 0.5m (1.5') behind face of curb or curbs on conventional highways.

**Conventional Highway:** A highway without control of access which may or may not be divided. Grade separations at intersections on access control may be used when justified at spot locations.

**CTC:** California Transportation Commission

**DARC Review:** Review all proposals to determine if 1) Caltrans can accommodate the TCCW equipment or space needs, 2) the proposal would affect Caltrans present or future operations, 3) proposal would provide any benefits to Caltrans specifically, or the State of California in general.

**District Airspace Review Committee (DARC):** Composed of representatives from various programs within the District office

**DGS-Telecommunications:** California Department of General Services Telecommunications Division. This division has the responsibility of coordinating all communications activities for the State. They review all applications for frequency compatibility, electronic equipment design and site availability. They make all radio vault space/antenna space assignments, assist the lessee with system design to ensure site integrity, and can dictate technical operation criteria to be included in the lease. This unit has the policy of keeping the number of separate operations at each site to a minimum to help reduce frequency incompatibility. They also will set policy/procedures to be followed by the Applicant if the Applicant plans to sub-let or expand facility use in any way.

**DISTRICT AIRSPACE:** Responsible for handling the everyday operations of licensing for all telecommunications (wireless) facilities.

**DLAO:** District Landscape Architecture Offices

**EIR:** Environmental Impact Report

**EIS:** Environmental Impact Statement

**Encroachment Permit:** A permissive authority to enter State highway right of way and to construct approved facilities or conduct specified activities. It is not a property right. It is a valid contract when accepted by the permittee.

**ESA:** Environmental Sensitive Area

**ESMR:** Enhanced Specialized Mobile Radio

**Excess Lands:** Department owned real property that is no longer required for rights of way or other operational purposes.

**Expressway:** An arterial highway with at least partial control of access, which may or may not be divided or have grade separations at intersections.

**FAA:** Federal Aviation Administration

**Facility:** A wireless facility including the equipment shed, tower or monopole, antennas, radio equipment, power and telephone line and site improvements (e.g. fencing, landscaping parking)

**FCC:** Federal Communications Commission

**FHWA:** Federal Highway Administration

**Freeway:** A divided arterial highway with full control of access and with grade separations at intersection crossings.

**GC:** Government Code

**ITS:** Intelligent Transportation Systems

**License Fee:** Fees established as being fair market value by using the Annual Rate Schedule for the particular site by Caltrans.

**Licensee:** Applicant, person, organization, company, or entity that is granted, by a license, use of a Caltrans owned facility or property.

**Licensor:** California Department of Transportation (Caltrans)

**Master License Agreement (MLA):** A license entered into by a licensed telecommunications wireless carrier with Caltrans (as a State agency) where the State is the Licensor and the carrier is the Licensee.

**NEPA:** National Environmental Protection Act

**Offset:** Fees, generally lower than fair market rate, established for some public and private users that provide some type of benefit to the State.

**PCS:** Personal Communications Services

**POC:** Pedestrian Over Crossing

**P&R:** Park and Ride Lot.

**Premise:** The entire property being used for a Caltrans facility i.e. maintenance station or park and ride.

**PUC:** Public Utilities Commission

**Right of Way Property System (RWPS):** The data base system used to identify all airspace leases and telecommunications licenses. All license fees received by accounting are entered into RWPS for a record of the carrier's account for each site. All payments received are deposited into the State Highway Account (SHA).

**S&H:** Streets and Highways Code

**Site:** The square footage of the property ("premise") required for the facility as identified on the plans and in the legal description of the SL.

**Signature Authority:** Proof of some kind accompanying the site license agreement when the signer for the lessee is representing some entity other than themselves, e.g. minute resolution, board meeting minutes, etc.

**SLA:** Site License Agreement

**SRRA:** State Roadside Rest Area

**Traveled Way (also Travelway):** The portion of the roadway for the movement of vehicles, exclusive of shoulders and auxiliary lanes.

**Term:** Period during which the Master License, Site License Agreement, or the Local permitting period will allow the carrier to perform.

**Vault Space:** Amount of space necessary to house the equipment for Caltrans radio equipment. This might be expressed in terms of rack space (4 square feet of floor space), a portion of an existing rack at the facility, or some other volumetric measure of space for which the Applicant is to be charged to mount their equipment. The actual equipment mounting design will be determined by Caltrans Maintenance Telecommunications Unit.